

**Manuscript version: Author's Accepted Manuscript**

The version presented in WRAP is the author's accepted manuscript and may differ from the published version or Version of Record.

**Persistent WRAP URL:**

<http://wrap.warwick/114630>

**How to cite:**

Please refer to published version for the most recent bibliographic citation information. If a published version is known of, the repository item page linked to above, will contain details on accessing it.

**Copyright and reuse:**

The Warwick Research Archive Portal (WRAP) makes this work by researchers of the University of Warwick available open access under the following conditions.

© 2018 Elsevier. Licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International <http://creativecommons.org/licenses/by-nc-nd/4.0/>.



**Publisher's statement:**

Please refer to the repository item page, publisher's statement section, for further information.

For more information, please contact the WRAP Team at: [wrap@warwick.ac.uk](mailto:wrap@warwick.ac.uk).

# Experienced Inequality and Preferences for Redistribution\*

Christopher Roth<sup>†</sup>     Johannes Wohlfart<sup>‡</sup>

September 17, 2018

We examine whether individuals' experienced levels of income inequality affect their preferences for redistribution. We use several large nationally representative datasets to show that people who have experienced higher inequality during their lives are less in favor of redistribution, after controlling for income, demographics, unemployment experiences and current macroeconomic conditions. They are also less likely to support left-wing parties and to consider the prevailing distribution of incomes to be unfair. We provide evidence that these findings do not operate through extrapolation from own circumstances, perceived relative income or trust in the political system, but seem to operate through the respondents' fairness views.

**JEL Classification:** P16, E60, Z13.

**Keywords:** Inequality, Redistribution, Macroeconomic experiences, Fairness.

---

\*We are grateful to the editor, Monica Singhal, and two anonymous referees for providing thoughtful comments that improved the paper considerably. We also would like to thank Alberto Alesina, Heike Auerswald, Peter Bent, Enzo Cerletti, Anujit Chakraborty, Leonhard Czerny, Franziska Deutschmann, Ester Faia, Eliana La Ferrara, Nicola Fuchs-Schündeln, Alexis Grigorieff, Ingar Haaland, Michalis Haliassos, Emma Harrington, Lukas Hensel, Michael Kosfeld, Ulrike Malmendier, Salvatore Nunnari, Matthew Rabin, Sonja Settele, Uwe Sunde, Guido Tabellini, Bertil Tungodden, Paul Vertier, Ferdinand von Siemens and seminar and conference participants at Frankfurt, ZEW Mannheim, the CESifo Workshop on Political Economy (Dresden), the Econometric Society (Edinburgh) and the Spring Meeting of Young Economists (Halle) for helpful comments. We also thank Ulrike Malmendier and Stefan Nagel for sharing code. Johannes Wohlfart thanks for support through the DFG project "Implications of Financial Market Imperfections for Wealth and Debt Accumulation in the Household Sector".

<sup>†</sup>Christopher Roth, Department of Economics, University of Oxford and CSAE, e-mail: christopher.roth@economics.ox.ac.uk

<sup>‡</sup>Johannes Wohlfart, Department of Economics, Goethe University Frankfurt, e-mail: wohlfart@econ.uni-frankfurt.de

# 1 Introduction

Over the last decades, many industrialized countries have seen dramatic increases in income inequality (Piketty, 2014). This is reflected in substantial variation across cohorts in the level of inequality individuals were exposed to during their lives. Macroeconomic experiences play a key role in shaping people’s preferences, beliefs and economic choices in various contexts, such as investment behavior (Malmendier and Nagel, 2011), inflation expectations (Malmendier and Nagel, 2016) and political attitudes (Fuchs-Schuendeln and Schuendeln, 2015; Giuliano and Spilimbergo, 2014). In this paper, we use large observational datasets to explore whether experienced levels of income inequality affect the level of inequality people find acceptable and their demand for redistribution.

People have an aversion to inequality (Fehr and Schmidt, 1999) and their views about what is an acceptable level of inequality are an important determinant of their demand for redistribution (Almås et al., 2011; Cappelen et al., 2007, 2013a,b, 2017). Experiencing a high level of inequality during one’s lifetime could either increase or decrease people’s acceptance of inequality. On the one hand, people could get accustomed to high levels of inequality and demand less redistribution. This is related to the idea that individuals evaluate the current state against a reference point that is influenced by the state in past periods (Abel, 1990; Coppock and Green, 2017). On the other hand, people may develop an even stronger distaste for inequality if they have first-hand experience of high inequality, resulting in greater demand for redistribution.<sup>1</sup>

The direction of the effect of inequality experiences has important implications for the long-run evolution of inequality and redistribution in Western societies. If experiences of high inequality make people more accepting of inequality, younger generations, who are used to an unequal distribution of incomes, will be less likely to vote for policies that reduce inequality. Consequently, support for such policies could become weaker as these cohorts make up a larger share of the electorate. If, by contrast, living through times of high inequality makes people more averse to unequal distributions of income, this could translate into increasing support for redistributive policies, and could thereby curb inequality.

We present evidence on the effect of inequality experiences on people’s demand for redistribution using several large nationally representative datasets on political attitudes: the US General

---

<sup>1</sup>This hypothesis is related to a literature from psychology on the differential effects of description versus experience on belief formation and decision making (Hertwig et al., 2004; Nisbett and Ross, 1980; Simonsohn et al., 2008; Weber et al., 1993). Accordingly, if inequality is a “bad”, then experiencing this “bad” directly will have a stronger influence on people’s preferences and beliefs than simply reading about inequality.

Social Survey, the German General Social Survey as well as the European Social Survey.<sup>2</sup> We examine inequality experiences defined in several ways, with a particular focus on our respondents’ experiences of income inequality while growing up, which we measure by calculating the average level of income inequality that prevailed in their country while they were between 18 and 25 years old. This period of life, which is sometimes referred to as “impressionable years”, has been identified as particularly important for the formation of political attitudes and beliefs (Giuliano and Spilimbergo, 2014; Krosnick and Alwin, 1989; Mannheim, 1970). For each birth-cohort in our datasets we compute the share of total income held by the top five percent of earners while this cohort was in their impressionable years.<sup>3</sup> We find very similar results using measures of life-time income inequality experiences following the methodology in Malmendier and Nagel (2011). In some of our specifications we also exploit variation in inequality experiences according to the region in which the respondent has grown up.

In all of our main specifications we control for age fixed effects and year fixed effects, i.e. we identify our key coefficient of interest using between-cohort differences in inequality experiences within age groups and years. By including age fixed effects, we rule out that our findings result from changes in preferences over people’s lifetime, for example, by people becoming more conservative as they get older. The inclusion of year fixed effects ensures that our results are not driven by common shocks that affect everyone in a given year. In addition, we control for cohort-group fixed effects (cohort group brackets of 25 years) which mitigates the concern that our findings are driven by differences in political attitudes across cohorts associated with longer-term changes in *zeitgeist*.<sup>4</sup> Throughout, we control for income and a number of socioeconomic characteristics as well as the national unemployment rate people experienced during their impressionable years which could be correlated with inequality experiences and could itself affect people’s demand for redistribution (Giuliano and Spilimbergo, 2014).

Across datasets we provide evidence that individuals who have experienced higher levels of income inequality are less in favor of redistributive policies and are less likely to vote for left-wing parties. We also find that people who have lived through times of high inequality hold more positive beliefs about inequality and are less likely to consider the prevailing distribution

---

<sup>2</sup>We also replicate our main findings using data from the International Social Survey Program.

<sup>3</sup>Our results are robust to using alternative measures of income inequality, namely the share of total income held by the top ten percent of earners, the share of total income held by the top one percent of earners, as well as the Gini coefficient of equivalized household incomes.

<sup>4</sup>Since we control for both age and year fixed effects, we cannot also include dummies for every individual cohort (Campbell, 2001). In addition, inequality experiences vary at the cohort-level, which prohibits separate identification of unrestricted cohort effects.

of incomes to be unfair. One plausible interpretation of these findings is that growing up under an unequal income distribution alters people’s perception of what is a fair division of resources, and thereby reduces their demand for redistribution.

We also examine alternative channels through which experiencing inequality could affect our respondents’ demand for redistribution. First, people could form their redistributive preferences based on the effect inequality had on them personally. In this case only people who personally benefited from high inequality while growing up should demand less redistribution. However, the effects are not significantly different for individuals with better starting conditions or more success in life, suggesting that this channel is an unlikely driver of our findings. Second, we show that the effects are unlikely to operate through people’s perceived relative income. Third, higher inequality experiences during impressionable years are not correlated with lower trust in the political system later in life.

To provide evidence against the possibility that our effects are driven by cohort-level changes in zeitgeist accompanied with changes in general political preferences, we conduct a series of placebo tests. We provide evidence that inequality experiences do not affect how conservative individuals are in matters unrelated to redistribution and inequality, such as nationalism, attitudes towards democracy, attitudes towards guns or attitudes towards immigrants. This is consistent with the interpretation that inequality experiences are driving the changes in redistributive preferences, rather than picking up more general differences in political attitudes across cohorts.

Moreover, we examine the sensitivity of our results to controlling for other experiences during people’s impressionable years, such as the experienced growth rate of real per capita GDP, the experienced political ideology of the leading party as well as the experienced size of the government. Our results barely change after controlling for these other experiences, indicating that omitted variable bias from other experiences during our respondents’ lives is less likely. Finally, our results are robust to controlling for proxies of parental values. This mitigates the concern that our findings reflect policy preferences of the respondents’ parent generation which are transmitted to the respondents and at the same time affect the level of inequality the respondents experienced during their formative years.

## 1.1 Related Literature

We contribute to a growing literature on the determinants of redistributive preferences (Alesina and La Ferrara, 2005; Alesina and Giuliano, 2011; Alesina et al., 2013; Durante et al., 2014), beliefs about inequality (Piketty, 1995) and fairness concerns (Almås et al., 2011; Cappelen et al., 2007, 2013a).<sup>5</sup> This literature has established that redistributive preferences are affected by culture (Alesina and Giuliano, 2011; Luttmer and Singhal, 2011), institutions (Alesina and Fuchs-Schündeln, 2007; Pan and Xu, 2015), relative income (Cruces et al., 2013; Karadja et al., 2017), reference points (Charité et al., 2015), beliefs about government debt (Roth and Wohlfart, 2018), and historical experiences (Chen et al., 2016; Roland and Yang, 2016).<sup>6</sup>

Our paper is most closely related to Giuliano and Spilimbergo (2014) who show that individuals who have experienced a recession during their formative years believe that success in life depends more on luck than effort, support more government redistribution, and tend to vote for left-wing parties. Carreri and Teso (2017) find an effect in the opposite direction on the preferences for redistribution of U.S. Members of Congress as measured by their voting records. Our paper shows that people’s experiences of unequal distributions of incomes matter on top of the effects of experienced macroeconomic conditions.

More generally, we complement the growing literature on the effects of life-time experiences on belief formation and economic behavior (Hertwig et al., 2004; Nisbett and Ross, 1980; Weber et al., 1993). For instance, Malmendier and Nagel (2011) provide evidence that having experienced negative macroeconomic shocks makes people less likely to invest in stocks. Moreover, Malmendier and Nagel (2016) show that people’s experienced inflation rates predict their contemporaneous inflation expectations. Fuchs-Schündeln and Schündeln (2015) provide evidence that people’s experience of living in a democracy increases their support for democratic regimes.

Our paper contributes to this literature by highlighting that experiences of income inequality are associated with lower preferences for redistribution. Moreover, we conduct a series of robustness checks that have not been commonly carried out in the previous experience literature. Specifically, we use various different experience measures following the methodologies in Giuliano and Spilimbergo (2014) and Malmendier and Nagel (2011), we control for other macroeconomic

---

<sup>5</sup>More generally, our paper is related to the literature on the malleability of (social) preferences (Becker et al., 2016; Kosse et al., 2016; Nunn and Wantchekon, 2011; Rao, 2018; Schildberg-Hörisch et al., 2014).

<sup>6</sup>For excellent reviews, see Alesina and Giuliano (2011) and Nunn (2012).

experiences, we conduct placebo exercises, and we provide a consistent set of results using two datasets reliant on within-country variation as well as two cross-country datasets.

Our findings also relate to a large theoretical and empirical literature studying the effects of inequality on demand for redistribution (Alesina and Rodrik, 1994; Benabou and Ok, 2001; Persson and Tabellini, 1994). According to the seminal theoretical contribution by Meltzer and Richard (1981), an increase in income inequality in an economy should be reflected in a higher level of redistribution. Intuitively, as the mean income in the economy increases relative to the income of the median voter, it becomes rational for the median voter to demand more redistribution. Empirically, inequality and the average demand for redistribution are negatively correlated across countries, but this pattern vanishes when looking at within-country movements of inequality (Kenworthy and McCall, 2008). Kerr (2014) finds that short-run increases in inequality within countries and within U.S. regions are associated with greater acceptance for wage differentials, but also with higher support for redistributive policies. Moreover, our paper also relates to a growing literature studying people’s perceptions of inequality and their redistributive preferences (Kuziemko et al., 2015; Norton and Ariely, 2011). For instance, Kuziemko et al. (2015) show that people’s demand for redistribution is fairly inelastic to information about the degree of inequality, while Alesina et al. (2018) find some effects of beliefs about intergenerational mobility on people’s demand for government redistribution. While the existing empirical literature studies the relationship between (perceptions of) *current* inequality and the demand for redistribution, we ask whether there is a persistent effect of *experienced past* levels of inequality, controlling for the influence of current inequality by including year fixed effects.

The paper proceeds as follows: Section 2 describes the data. In section 3, we present the main results of our analysis. Section 4 conducts a series of robustness checks. We discuss potential alternative mechanisms in section 5. Finally, the paper concludes.

## 2 Data

### 2.1 General Social Survey (US)

We leverage rich data on political preferences and beliefs from the General Social Survey (GSS). This dataset consists of repeated cross-sections from 1972 to 2014 that are representative of the US and has been widely used in previous research in economics (Alesina and La Ferrara, 2000; Giuliano and Spilimbergo, 2014). Following Giuliano and Spilimbergo (2014) we focus on out-

come measures of preferences as well as beliefs related to inequality and redistribution, which may both be shaped by people’s experiences while growing up. We also examine effects on beliefs because the previous literature emphasizes that people’s beliefs about the sources and consequences of economic inequality are an important determinant of their support for redistribution (Alesina and Angeletos, 2005; Alesina et al., 2001; Benabou and Tirole, 2006; Fong, 2001). For instance, individuals who believe that success in life is due to effort rather than luck will demand less redistribution (Piketty, 1995). Part of the effects of inequality experiences on redistributive preferences could therefore operate through changes in beliefs. Alternatively, inequality experiences could directly affect people’s preferences, and people may adjust their beliefs independently of their preferences. We are not able to distinguish between these alternatives with the available cross-sectional data.<sup>7</sup> Specifically, we focus on the following survey measures:

- **Help Poor:** The respondents’ view on whether the government in Washington should do everything to improve the standard of living of all poor Americans or whether it is not the government’s responsibility, and that each person should take care of herself or himself.
- **Pro-welfare:** Individuals’ opinion on whether the government is not spending enough money on assistance to the poor.
- **Success due to luck:** People’s belief on whether success is mostly due to luck or owing to hard work.

We also consider people’s self-placement on a conservative-liberal scale, their party affiliation, and their self-reported past voting behavior. We examine whether people identify more as Democrat or Republican and whether they report having voted for Democrats or Republicans. All variables are coded such that high values mean that they are more in favor of redistribution and more likely to vote for Democrats. We also use questions on people’s self-assessed social and economic position in society that allow us to shed light on the mechanisms behind our findings (see Appendix D for details). Table A.14 displays the summary statistics for our sample from the General Social Survey.

---

<sup>7</sup>Since inequality experiences could affect people’s beliefs, controlling for people’s beliefs about inequality in regressions of redistributive preferences on inequality experiences would result in a bad control problem (Angrist and Pischke, 2008).



## 2.2 German General Social Survey

The German General Social Survey (Allbus) collects data on political attitudes and behavior, as well as a large set of demographics in Germany. Every two years since 1980 a representative cross-section of the population was surveyed. We use data from the waves from 1980 to 2014. We focus on unique variables on beliefs about the sources and consequences of inequality and on views on the fairness of the prevailing income distribution in the German General Social Survey:

- **Inequality is Unfair:** People’s opinion on whether the social inequalities prevailing in Germany are unfair.
- **Inequality does not increase motivation:** Individuals’ beliefs about the effect of inequality on people’s motivation.
- **Inequality reflects luck:** Respondents’ disagreement to the statement that differences in rank between people are acceptable as they essentially reflect how people used their opportunities.

We code the variables such that high values stand for less favorable beliefs and attitudes regarding inequality. In addition, we focus on outcomes that are similar to the outcomes we use in the General Social Survey. We look at political behavior as measured through voting intentions, self-reported past voting behavior and people’s self-assessment on a political scale. These variables are described in detail in Appendix D. Due to lacking inequality data we drop all respondents who have grown up in the German Democratic Republic and focus only on West German Respondents. In Table A.15 we show summary statistics for our sample from the Allbus.

## 2.3 European Social Survey

The European Social Survey (ESS) is a dataset containing rich information about political attitudes and beliefs of the various populations in Europe. It also contains data on a rich set of demographic variables. The ESS has been widely used to study redistributive preferences, see for example Luttmer and Singhal (2011). We make use of all available waves from the ESS (2002-2014).<sup>8</sup>

---

<sup>8</sup>Most of our sample from the ESS comes from three countries: France, Germany and the United Kingdom, each of which makes up for around 20 percent of the sample. Denmark, Finland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden and Switzerland all together constitute about 40 percent of the overall sample. We drop all East German respondents from the sample.

Our key outcome variables of interest are a measure capturing whether people are in favor of redistribution, people’s self-reported voting behavior, and their self-placement on a political scale. As in the other datasets higher values represent more left-wing views. We also use data on people’s trust in the political system to shed light on mechanisms. All outcomes are described in more detail in Appendix D. In Table A.16 we provide summary statistics for our sample from the ESS.

## 2.4 Normalizations, Controls and Missings

The outcome variables we use in our analysis are mostly self-placements between left and right or between agreement and disagreement to a particular statement on 4-point, 5-point or 10-point scales. We normalize all outcome variables and our measures of experienced inequality using the mean and the standard deviation of the respective variables in our samples of interest. These normalizations enable us to compare effect sizes across outcomes and across datasets. We construct a consistent set of controls for key demographics, such as income, gender, marital status, education, religious affiliation and employment status for all of the datasets of interest. In Appendix E we describe the exact controls we include for each of the different datasets.<sup>9</sup>

## 2.5 Inequality and Unemployment Data

We use data on top income shares from the “World Wealth and Income Database” (WID) (Alvaredo et al., 2011), which is the most complete source of internationally comparable data on income inequality. The database contains very rich data on the share of overall national income earned by people at the top of the distribution. We focus on the share of total gross income earned by the top one, the top five and the top ten percent of earners respectively. We also use data on the Gini coefficient of equivalized disposable household incomes taken from the “Chartbook of Economic Inequality” (Atkinson and Morelli, 2014), which also captures variation in inequality that is not reflected in top income shares. For most countries data on the Gini coefficient are available only from a much later point in time than data on top income shares. Therefore, we focus on the experienced share of total income earned by the top five percent of earners in our main analysis.

Our data on top income shares refer to total earnings before taxes and transfers, while our data on the Gini coefficient are based on disposable household income after taxes, due to differences

---

<sup>9</sup>To deal with missing values and to keep the sample as large as possible, for each of the above categories of controls we code missings as zero and include a dummy variable indicating missing values in that category.

in data availability between the two measures. Similarly, while the data on top income shares from different countries in the WID are the most internationally comparable data on inequality available, there are still some differences in the construction of these measures. In all our cross-country estimations we include country fixed effects to make sure that our findings are not driven by these differences.<sup>10</sup>

In our analysis we focus on those countries for which we could obtain historical inequality data from the World Wealth and Income Database. We use linear interpolation to impute data for years in which inequality data are missing. We impute inequality data if the gap between any two points in time for which inequality data are available, is at most six years.<sup>11</sup> In addition, we use historical data on national unemployment rates from Global Financial Data (GFD) and use the same rule to impute missing values.

## 2.6 Construction of Experience Variable

The literature on experience effects has identified the age period between 18 and 25 (“impressionable years”) as particularly important for the formation of political attitudes and beliefs. During this age period most individuals begin to participate in political life and enter the labor market. Krosnick and Alwin (1989) provide evidence that individuals’ susceptibility to attitude change is high during the impressionable years and drops considerably thereafter. Giuliano and Spilimbergo (2014) find that experiencing a recession while aged between 18 and 25 significantly affects political preferences later in life, while similar experiences in other age ranges do not seem to matter. Following this literature, we calculate, for each birth-cohort in our datasets, the average share of total income held by the top five percent of earners while this birth cohort was in their impressionable years. While we focus on experiences during impressionable years in our main specifications, it could also be the case that inequality experiences in other periods of life affect individual preferences. We therefore examine the robustness of our findings to using a measure of inequality experiences along the lines of Malmendier and Nagel (2011) that allows experiences over the entire lives of our respondents to affect their preferences. The construction of this alternative measure of inequality experiences is described in Appendix G.

In our main specifications we focus on the national-level inequality that our respondents experienced during their impressionable years in their country of residence,  $IE_{it}$ . In an alternative

---

<sup>10</sup>In Appendix F, we provide a detailed overview on the inequality data that are available for each country and the respective cohorts we are able to use in our analysis.

<sup>11</sup>This allows us to use much larger samples of individuals in our analyses. We have made sure that our results are robust to using different maximum gaps for the imputation of the inequality data.

specification we use region-specific inequality experiences,  $IE_{irt}$ . The GSS provides data on the census division in which the respondents lived at age 16, and we compute someone’s experienced inequality during his or her impressionable years using historical data on top income shares in this census division.<sup>12</sup>

As our datasets do not contain any direct measures of the level of inequality people perceived while growing up, we measure experienced inequality using the actual level of inequality that prevailed during our respondents’ formative years. One concern is that people’s beliefs about inequality are biased (Norton and Ariely, 2011) and do not co-move with actual levels of inequality. We address this concern using data from the International Social Survey Program on Social Inequality (ISSP) to show that people’s perceived levels of inequality closely co-move with actual inequality in their country of residence. Specifically, we show that people believe that they live in a more unequal society when inequality is higher. Similarly, people report higher estimates of pay gaps between CEOs, cabinet ministers and doctors on the one hand, and unskilled workers on the other hand, when inequality is high. These results are robust to including country and time fixed effects as well as demographic controls (Tables A.21 and A.22).

While these findings indicate that our measure of inequality experiences is valid, the extent to which individuals “experience inequality” depends on individual-level characteristics like people’s media consumption, their place of residence or their work place during their formative years. This means that our measure of “inequality experience” is measured with noise. However, this measurement error does not constitute a threat to the internal validity of our findings and, if anything, will bias our estimates towards zero.

Figure 1 plots the average income share of the top five percent experienced over impressionable years against cohort for the largest countries in our sample. In the US and in the UK cohorts born from around 1960 onward experienced higher levels of inequality during their impressionable years relative to earlier cohorts. The pattern is reversed for France. In the case of Germany, experienced inequality is the lowest for people born around 1960 and higher for those born before that or after. Figure 2 shows experienced inequality for cohorts growing up in the different US census divisions. The large differences across census divisions provide an additional source of variation that we exploit in our estimations.<sup>13</sup>

---

<sup>12</sup>We provide evidence that our results are robust to excluding movers (defined as people living in a different census division when they are interviewed than the census division they lived in at age 16).

<sup>13</sup>In Figures 3 and 4 in Appendix B we display the evolution of top income shares over time for these countries and for the different US census divisions.

[Insert Figures 1 and 2]

To account for other macroeconomic experiences that might affect redistributive preferences (Giuliano and Spilimbergo, 2014), we calculate the average national unemployment rate that prevailed during our respondents' impressionable years,  $UE_{it}$ . As our main experience variables are reliant on having lived through the impressionable years (age 18 to 25) we restrict our attention to people of age 26 and older.

### 3 Empirical Strategy and Results

#### 3.1 Empirical Specification: GSS and Allbus

We estimate the effect of inequality experiences,  $IE_{it}$ , on people's redistributive preferences or beliefs about inequality,  $y_{irt}$ . We control for people's national-level unemployment experiences,  $UE_{it}$ , and a vector of individual characteristics,  $\mathbf{X}_{it}$ .<sup>14</sup> In addition, we account for age fixed effects,  $\delta_{it}$ , regional fixed effects<sup>15</sup>,  $\rho_r$ , cohort group fixed effects,  $\pi_i$ <sup>16</sup>, and year fixed effects,  $\beta_t$ . Specifically, we estimate the following equation:

$$y_{irt} = \alpha_1 IE_{it} + \alpha_2 UE_{it} + \Pi^T \mathbf{X}_{it} + \delta_{it} + \rho_r + \beta_t + \pi_i + \varepsilon_{irt} \quad (1)$$

The inclusion of age fixed effects ensures that our findings are not driven by changes in political preferences that occur over people's lifetime, such as people becoming more conservative as they get older. The year fixed effects control for current macroeconomic conditions that affect everyone in a given year, such as adverse economic shocks or the contemporaneous level of inequality. Finally, by including fixed effects for different groups of cohorts it becomes less likely that our findings are driven by longer-term shifts in political attitudes across cohorts that are unrelated to inequality experiences.<sup>17</sup>

We also use region-specific inequality experiences,  $IE_{irt}$ , for the GSS. In these estimations we control for fixed effects for the census division our respondent lived in at age 16,  $\rho_{16i}$ , interacted

<sup>14</sup>This vector includes household income, household size, the respondent's marital status, religion, educational level and employment status.

<sup>15</sup>In the US this corresponds to census division and in Germany to the federal state.

<sup>16</sup>We include dummy variables for the cohorts born between 1876 and 1900, between 1901 and 1925, between 1926 and 1950, between 1951 and 1975, and 1976 or later, respectively. We are not powered to include too fine-grained cohort group fixed effects.

<sup>17</sup>We obtain very similar results if we do not include cohort group fixed effects.

with age fixed effects,  $\delta_{it}$ , cohort group fixed effects,  $\pi_i$ , as well as year fixed effects,  $\beta_t$ . This in turn allows us to non-parametrically control for age-specific trends at the regional level, differences across cohort groups at the regional level, as well as shocks that are correlated within groups of people who have grown up in the same census division. The specification is given as follows:

$$y_{irt} = \alpha_1 \text{IE}_{irt} + \alpha_2 \text{UE}_{it} + \Pi^T \mathbf{X}_{it} + \rho_{16it} \times \delta_{it} + \rho_{16it} \times \beta_t + \rho_{16it} \times \pi_i + \rho_r + \varepsilon_{irt} \quad (2)$$

### 3.2 Empirical Specification: ESS

The empirical specification for the European Social Survey is very similar to the specification that uses region-specific variation in inequality experiences in the US. We estimate the effect of country-specific inequality experiences during impressionable years,  $\text{IE}_{ict}$ , on people’s redistributive preferences,  $y_{ict}$ . We control for national-level unemployment experiences during impressionable years,  $\text{UE}_{ict}$ , and a vector of individual controls,  $\mathbf{X}_{it}$ . In addition, we account for country fixed effects,  $\rho_c$ , interacted with both time fixed effects,  $\beta_t$ , and cohort group fixed effects,  $\pi_i$ , as well as country-specific age trends,  $\text{age}_{it} \times \rho_c$ .<sup>18</sup>

$$y_{ict} = \alpha_1 \text{IE}_{ict} + \alpha_2 \text{UE}_{ict} + \Pi^T \mathbf{X}_{it} + \rho_c \times \text{age}_{it} + \rho_c \times \beta_t + \rho_c \times \pi_i + \varepsilon_{ict} \quad (3)$$

For all of the previous three empirical specifications, we report standard errors that are two-way clustered by the respondents’ age and cohort as we might expect large intra-cluster correlations in these non-nested clusters (Cameron and Miller, 2015). Our results are robust to clustering standard errors just by cohort or age.<sup>19</sup> Since we test for a large set of outcome variables, we account for multiple hypothesis testing by adjusting the p-values using the “sharpened q-value approach” (Anderson, 2008; Benjamini et al., 2006). Within each family of outcomes, we control for a false discovery rate of 5 percent (Anderson, 2008). We employ false discovery rate adjustment of p-values as it is the most power-preserving way of adjusting for multiple-

<sup>18</sup>Since each country is part of the ESS only in a few waves (sometimes only one) and since the time dimension of the ESS is short (2000-2015), we do not have enough variation of inequality experiences within country-age groups to include an interaction of age fixed effects and country fixed effects. Our independent variable varies at the country-cohort level, so in the extreme case of observing observations from a particular country only in one year, all the variation in the independent variable would be absorbed by the interaction of age fixed effects and country fixed effects.

<sup>19</sup>For all of these datasets we make use of population weights. This makes sure that we can make statements about a sample that is representative of the general population.

hypothesis testing within families of outcomes. These adjusted p-values are displayed in the tables as FDR-adjusted p-values.

### 3.3 Results

Table 1 presents the results from the General Social Survey. Panel A reports the results on national-level inequality experiences during impressionable years, while Panel B shows the results using regional inequality experiences. Individuals with higher inequality experiences are less likely to be in favor of helping the poor and less in favor of welfare (Columns 1 and 2). People who experienced higher inequality are marginally significantly more likely to attribute success in life to effort rather than luck (Column 3). Moreover, people with higher levels of inequality experience are less likely to be liberal and less likely to vote for Democrats (Columns 4 to 6). Across specifications we find similar effects for national and regional experiences in terms of both significance and magnitude.

In Table 2 we show the results from the German General Social Survey (ALLBUS). Individuals who experienced higher inequality while growing up are less likely to consider the prevailing level of inequality as unfair (Column 1), consistent with the idea that inequality experiences affect views on what is a fair division of resources. Moreover, they are more likely to believe that inequality is important for motivation (Column 2) and to attribute differences in income to effort rather than luck (Column 3). In line with the previous findings, experiences of higher inequality are correlated with lower support for left-wing parties (Columns 4 to 6).

Table 3 displays the results from the European Social Survey. As can be seen in Column 1, people with high inequality experiences are less likely to agree to the statement that “the government should take measures to reduce differences in income levels”. In addition, people with more inequality experiences place themselves less on the left on a political scale and are less likely to have voted for a left-wing party in the last election. All of our results are robust to taking into account multiple-hypothesis testing.<sup>20,21</sup>

[Insert Tables 1 - 3]

---

<sup>20</sup>The FDR adjusted p-values are sometimes lower than the naïve p-values. This is the case as a lot of the tests reject or almost reject the null. Therefore, the algorithm assumes that actually most null hypotheses are false, and computes a very low false discovery rate associated with each hypothesis.

<sup>21</sup>In Tables A.17 - A.19 in Appendix A, we present our main results displaying all relevant controls. The controls predict preferences for redistribution in line with the previous literature (Alesina and Giuliano, 2011, 2015). For instance, individuals with higher incomes and more education are more against redistribution, while females are more in favor of redistribution.

To illustrate the magnitude of the effects, we compare our estimated effect sizes on our respondents' self-placement on a political scale to the effects of other determinants of preferences for redistribution. According to our estimates using national-level inequality experiences and the General Social Survey (US), a one standard deviation increase in inequality experiences leads to a decrease of 3.8 percent of a standard deviation in people's tendency to consider themselves as left-wing. Moving from the inequality experiences of the cohort born in 1950 (very low inequality experiences) to the cohort born in 1980 (high inequality experiences) implies a 10.3 percent of a standard deviation decrease in the dependent variable. For comparison, being female is associated with an increase by 12.5 percent of a standard deviation, while a high school degree is associated with a decrease by around 9.5 percent of a standard deviation.

We obtain larger effect sizes in the sample from the German General Social Survey. Here, a one standard deviation increase in inequality experiences leads to a decrease of people's tendency to consider themselves left-wing by around 9.6 percent of a standard deviation. Moving from the low inequality experiences of people born in 1950 to high inequality experiences of the cohort of 1980 implies a decrease in the dependent variable by 21.2 percent of a standard deviation. For comparison, being female increases the self-assessment as left-wing by around 7.7 percent of a standard deviation. Moving from the lowest to the highest quintile in the income distribution leads to a decrease in the dependent variable by 19.2 percent of a standard deviation.

According to our estimations on the cross-country sample from the ESS a one standard deviation increase in inequality experiences leads to a decrease in people's self-classification as left-wing by around 11.7 percent of a standard deviation. For the cohort born in 1980, moving from the country where this cohort has the lowest inequality experience (Denmark) to the country where this cohort has the highest inequality experience (UK) implies a decrease in the tendency of people to consider themselves left-wing by almost 50 percent of a standard deviation.

We also replicate our key results using data on voting behavior and support for redistribution from the International Social Survey Program Module on Social Inequality. Our estimates are fairly similar in terms of magnitude and significance, which provides us with additional confidence in our results (Appendix C).

Our findings are not contradictory to Kerr (2014) who finds that short-run increases in inequality within countries or U.S. regions are associated with greater demand for redistribution. He identifies contemporaneous effects of short-term changes in inequality that operate uniformly across cohorts. These effects are absorbed by year fixed effects in our analysis. By contrast, we



identify the persistent effect of the level of inequality people experienced during their formative years on top of the effects of contemporaneous inequality. While all cohorts may exhibit a distaste for inequality, our findings are consistent with the idea that the strength of this concern depends on people’s experiences during their lives. Our results are also in line with Alesina and Fuchs-Schündeln (2007) who provide evidence that people who have grown up and lived in East Germany under the communist regime are more in favor of redistribution than people from West Germany. Our finding of a negative effect of inequality experiences on demand for redistribution provides an additional explanation for higher demand for redistribution in formerly communist countries, where income inequality was often low.

## 4 Robustness

### 4.1 Other Measures of Inequality Experiences

In our main specifications we have focused on inequality experiences during our respondents’ impressionable years, i.e. between the age of 18 and 25 (Giuliano and Spilimbergo, 2014; Krosnick and Alwin, 1989; Mannheim, 1970). In this section, we examine the influence of experiences during other periods of life on people’s preferences for redistribution and demonstrate the robustness of our results to using the methodology in Malmendier and Nagel (2011) to measure inequality experiences.

First, we use the Allbus and the GSS to examine the effect of inequality experiences during different eight year age intervals (2–9, 10–17, 26–33, 34–41, and 42–49) in our respondents’ lives. While we still find significantly negative effects of experiences in life periods surrounding the impressionable years (10-17 and 26-33, respectively), the effects are weaker or vanish completely for other age ranges (see Tables A.1 - A.3).<sup>22</sup>

Second, we find very similar effects of inequality experiences when we use the methodology developed by Malmendier and Nagel (2011). While in our main estimations we look at the effect of inequality experiences during people’s formative years, this alternative measure is based on a weighted average of top income shares experienced over a respondent’s lifetime until the time of the interview. Thus, in contrast to our previous measures, we now allow more recent

---

<sup>22</sup>Given the nature of the dataset, it is difficult to compare the importance of experiences during impressionable years versus experiences during other periods of life. Since in each estimation we only focus on individuals who have lived through the relevant life period, we cannot hold constant the sample size and sample composition in the different specifications.

experiences to still have some effect. In line with the above findings that earlier experiences matter more than later experiences, we use a weighting factor that gives more weight to early experiences and in which experiences only matter beginning from age 18.<sup>23</sup> We re-estimate our main specifications using the same set of controls but employing these alternative measures of experienced inequality and experienced unemployment. We obtain very similar results in terms of effect size and statistical significance when we use this alternative measure of inequality experiences (Panels G of Tables A.1 and A.3). All in all, this evidence corroborates our finding that inequality experiences are reflected in people’s beliefs, values and political preferences, and experiences during people’s formative years seem to be particularly important.

## 4.2 Placebo Outcomes

It could be the case that our estimates merely pick up across-cohort differences in political preferences and in particular in how left-wing people in different cohorts generally are. The inclusion of 25-year cohort-group fixed effects in our main specifications ensures that our results are not driven by longer-term general shifts in preferences across cohorts. To further address this concern, we show that other political attitudes that differ between the left and the right of the political spectrum, but that are not directly related to inequality and redistribution, are not affected by our measures of inequality experiences. Inequality experiences do not significantly affect nationalism, attitudes towards guns, attitudes towards immigrants<sup>24</sup>, attitudes towards democracy, attitudes towards the unification of the EU and people’s belief in god (Tables A.4 - A.6).<sup>25</sup>

## 4.3 Other Experiences during Impressionable Years

We also examine whether our results are sensitive to controlling for other macroeconomic experiences during impressionable years. First, we control for the experienced size of the government by including the average ratio of total tax revenue relative to GDP experienced during the impressionable years. Second, we include a proxy for experienced political ideology, namely the fraction of someone’s impressionable years in which a Republican president (US) or conservative chancellor (Germany) was in office. In addition, we examine whether our estimates are sensitive

---

<sup>23</sup>For details regarding the construction of this alternative measure see Appendix G.

<sup>24</sup>In the Allbus we focus only on attitudes towards immigrants that are not related to economic concerns. The respective variables in the GSS and the ESS mainly refer to whether the number of immigrants should be increased or decreased.

<sup>25</sup>In Appendix D, we provide detailed information on the placebo variables used in our analysis.

to the inclusion of the average growth rate of real GDP per capita during the impressionable years. When we control for these other experiences our main results barely change (see Tables A.7 and A.8).<sup>26</sup> This indicates that our results are less likely to reflect other experiences people made while growing up which are correlated with inequality experiences.

#### 4.4 Parental Values

One alternative interpretation of our findings is that the experienced inequality of 18-25-year-olds is an outcome of policy demands made by their parents' cohort, and that these parents transmit values to the respondents (Dohmen et al., 2011). We examine how sensitive our estimated effects of inequality experiences are to controlling for a large set of proxies for parental values available in the General Social Survey, such as parental education, whether a respondent's mother worked while the respondent grew up and whether the respondent lived in an urban area at age 16.<sup>27</sup> To the extent that these variables vary across cohorts, they should capture differences in parental values that could be transmitted to respondents and also affect the inequality experiences of our respondents through their parents' policy demands.

Panel A of Table A.9 shows the coefficient estimates of national inequality experiences from our main specification. Panel B displays the coefficient estimates of national inequality experiences conditional on the additional set of controls proxying for parental values. Our estimated effects do not change much after including additional control variables, suggesting that it is less likely that our results are driven by parental values that affect the level of inequality through the parents' policy demands and at the same time are transmitted to the respondents.

#### 4.5 Other Robustness Checks

In Tables A.10-A.13 we examine how sensitive our results are to a variety of robustness checks. Our results are robust to using different definitions of income inequality based on (i) the share of income earned by the top ten percent, (ii) the share of income earned by the top one percent as well as (iii) the Gini coefficient of equalized disposable household incomes which is available for

---

<sup>26</sup>We demonstrate robustness of our main specification by including these other experiences one at a time. Since all experience variables vary at the cohort level, and since macroeconomic variables tend to be highly correlated, including all these other experiences at once would lead to problems of multicollinearity.

<sup>27</sup>Specifically, we control for whether the respondent's father completed at most high school, whether the respondent's father completed college, whether the respondent's mother completed at most high school, whether the respondent's mother completed college, whether the father was mostly self-employed during the respondent's childhood, whether the mother worked when the respondent was young, whether the respondent lived in an urban area, whether the family's income was above the median income when the respondent was aged 16 and for census division fixed effects of the respondents' residence at age 16.

a much smaller sample of respondents.<sup>28</sup> The Gini coefficient also captures variation in inequality that is not reflected in top income shares. In contrast to top income shares which are based on before-tax incomes, the Gini coefficient measures after-tax income inequality. We obtain very similar results when we use these alternative inequality measures. If anything, we find larger effect sizes when we use the Gini coefficient instead of top income shares.

In addition, we show that our results remain unchanged when we exclude all individuals with missing values in any of the controls. Our findings are also robust to not controlling for people’s national unemployment experiences which alleviates concerns that inequality experiences operate through unobservable long-run effects of unemployment experiences. Moreover, the results are unaffected when we control for age trends rather than age fixed effects or when we exclude movers from our estimations on the GSS which rely on regional variation in income inequality experiences.<sup>29</sup> As a final robustness check we exclude the 25-year cohort group fixed effects from our specifications and obtain very similar results.

## 5 Alternative Mechanisms

One plausible interpretation of our findings is that an experienced distribution of incomes can affect the level of inequality people find acceptable and thereby influence people’s demand for redistribution.<sup>30</sup> Above we presented evidence that people are less likely to perceive the prevailing distribution of incomes as unfair if they have higher inequality experiences. Since everyone in a given year faces the same aggregate level of inequality, this is consistent with people interpreting the fairness of the prevailing distribution in light of their inequality experiences. In this section we address three alternative mechanisms that could be driving our findings.

### 5.1 Extrapolation from Own Circumstances

The negative effect of experiencing inequality on preferences for redistribution could be driven by individuals who benefited personally from high levels of inequality while they were young. If this was the case, we would expect the effect to be stronger for those who had better starting

---

<sup>28</sup>While a lot of historical data on the Gini coefficient exist in the US, much less data on the Gini coefficient are available for most European countries in our sample. This implies that the samples we can use in our analysis for the ESS are much smaller than for the measures of top income inequality.

<sup>29</sup>We define movers as people who live in a different census division when they are interviewed than when they were aged 16.

<sup>30</sup>Previous literature has established that people’s views about what is an acceptable level of inequality are an important determinant of their demand for redistribution (Almås et al., 2011; Cappelen et al., 2007, 2013a,b, 2017; Herz and Taubinsky, 2017).

conditions in life and for those who were more successful in life. To shed light on this mechanism, we examine heterogeneous effects by a variety of proxies for starting conditions in life and for economic status. For each of our main outcomes, we estimate the following specification:

$$y_{irt} = \alpha_1 \text{IE}_{it} + \alpha_2 \text{IE}_{it} \times \text{interact}_{it} + \alpha_3 \text{interact}_{it} + \alpha_4 \text{UE}_{it} + \Pi^T \mathbf{X}_{it} + \delta_{it} + \rho_r + \beta_t + \pi_i + \varepsilon_{irt} \quad (4)$$

where  $\text{interact}_{it}$  is the interaction variable of interest. We then calculate the estimated average effect sizes (AES) for the coefficients  $\alpha_1$  and  $\alpha_2$  across the six specifications we estimate in the GSS or the Allbus, respectively (Giuliano and Spilimbergo, 2014; Kling et al., 2005).<sup>31</sup> Using the AES instead of individual coefficients increases our effective statistical power. This is particularly important for the heterogeneity analysis for which we have lower statistical power.

In Table 4 we show that there is no significant heterogeneity by relative family income at age 16 and by father’s education in our sample from the GSS.<sup>32,33</sup> This suggests that the effect is not driven by those who had better starting conditions in life. Moreover, the effect is not significantly different for those with high current relative income or those with high education. In Table 5 we show that also in the Allbus sample the effects are fairly uniform across groups. Taken together, these homogeneous results suggest that extrapolation from own circumstances is an unlikely explanation for the association of inequality experiences with redistributive preferences.<sup>34</sup>

[Insert Tables 4 and 5]

## 5.2 Perceived Relative Income

Experiences of inequality could also change people’s beliefs about their economic status. Specifically, people who have grown up in times of high income inequality, and who are therefore used to more inequality, could be less likely to perceive their current relative income as low. People’s

<sup>31</sup>The AES is defined as the average of all coefficient estimates across a family of estimations, where each coefficient is divided by the standard deviation of the respective outcome. All our outcomes are normalized to have standard deviation one, so the AES is the simple average of the estimated coefficients. We calculate p-values for the AES based on simultaneous estimation of the six regressions.

<sup>32</sup>These variables are coded as one if the respondent considered the income of his family at age 16 to be at least average and if the respondent’s father had at least high school education, respectively.

<sup>33</sup>We also do not find heterogeneity according to education of the mother.

<sup>34</sup>We also examined heterogeneity according to age, but do not report the results for brevity. We found that the effect is fairly uniform across age groups, suggesting that the effects persist over the lives of the respondents. In addition, we checked whether the effects vary by the degree to which someone’s perceived relative income increased or decreased between his or her youth and the survey year. We found no evidence for heterogeneous effects along this dimension.

beliefs about their position in the income distribution have been shown to change people’s demand for redistribution (Cruces et al., 2013; Karadja et al., 2017). We therefore test whether experiences of high inequality lower people’s perceived relative income and perceived social class. We find no significant effect of inequality experiences on perceived relative income and social class using the GSS and the Allbus (Columns 1 to 3 of Table 6).

[Insert Table 6]

### 5.3 Trust in the Political System

Kuziemko et al. (2015) document that providing people with information about the high level of income inequality in the US lowers their trust in the government to do what is right. They interpret this as an explanation why their information treatment does not shift respondents’ demand for redistribution. Similarly, experiencing high levels of income inequality could lower people’s trust in the government, which in turn could reduce their demand for government redistribution. Our datasets do not contain questions on trust in the government. However, respondents in the ESS are asked whether they trust their national parliament, politicians and political parties. We regress these measures of trust in the political system on our respondents’ inequality experiences conditional on the same set of controls as in the main specification. As can be seen in columns 4 to 6 of Table 6, we do not find an effect of inequality experiences on our respondents’ trust in the national parliament, on their trust in politicians or on their trust in political parties.

Taken together, we find no evidence that the effects work through extrapolation from own circumstances, perceived relative income or trust in the political system. Our preferred interpretation of the findings is therefore that respondents evaluate the fairness of the prevailing level of inequality in light of the level of inequality they have experienced during their lives.

## 6 Conclusion

We use several large nationally representative datasets to highlight that people who have lived through times of higher inequality are less left-wing as measured by their redistributive preferences as well as their party affiliation and voting behavior. We also show that individuals with higher inequality experiences hold more positive beliefs about inequality and are less likely to consider the prevailing level of inequality as unfair.

One plausible interpretation of our findings is that people evaluate current levels of inequality in light of their experiences, and that preferences for redistribution are shaped by the level of inequality people experienced while growing up. Accordingly, increases in inequality over the last decades are reflected in lower preferences for redistribution among younger generations relative to older generations. While fairness concerns may have led to an increasing demand for redistribution across cohorts (Kerr, 2014), these concerns seem to be weaker for younger generations who are more used to high levels of inequality. Going forward, the longer high levels of inequality prevail, the higher will be the average level of experienced inequality among voters. Under our preferred interpretation of the data, the forces pushing society back towards lower levels of inequality may become weaker the longer high levels of inequality prevail.

## References

- Abel, Andrew B**, “Asset Prices under Habit Formation and Catching Up with the Joneses,” *American Economic Review Papers and Proceedings*, 1990, *80* (2), 38–42.
- Alesina, Alberto and Dani Rodrik**, “Distributive Politics and Economic Growth,” *The Quarterly Journal of Economics*, 1994, *109* (2), 465–490.
- **and Eliana La Ferrara**, “Participation in Heterogeneous Communities,” *The Quarterly Journal of Economics*, 2000, *115* (3), 847–904.
- **and —**, “Preferences for Redistribution in the Land of Opportunities,” *Journal of Public Economics*, 2005, *89* (5), 897–931.
- **and George-Marios Angeletos**, “Fairness and Redistribution: US vs. Europe,” *The American Economic Review*, 2005, *95* (4), 960–980.
- **and Nicola Fuchs-Schündeln**, “Good-bye Lenin (or not?): The Effect of Communism on People’s Preferences,” *The American Economic Review*, 2007, *97* (4), 1507–1528.
- **and Paola Giuliano**, “Preferences for Redistribution,” in “Handbook of social economics,” Vol. 1, Elsevier, 2011, pp. 93–131.
- **and —**, “Culture and Institutions,” *Journal of Economic Literature*, 2015, *53* (4), 898–944.

- , **Edward L Glaeser**, and **Bruce Sacerdote**, “Why Doesn’t the United States Have a European-Style Welfare State?,” *Brookings Papers on Economic Activity*, 2001, *2001* (2), 187–277.
- , **Paola Giuliano**, and **Nathan Nunn**, “On the Origins of Gender Roles: Women and the Plough,” *The Quarterly Journal of Economics*, 2013, *128* (2), 469–530.
- , **Stefanie Stantcheva**, and **Edoardo Teso**, “Intergenerational Mobility and Preferences for Redistribution,” *American Economic Review*, 2018, *108* (2), 521–554.
- Almås, Ingvild, Alexander W Cappelen, Jo Thori Lind, Erik Ø Sørensen, and Bertil Tungodden**, “Measuring Unfair (In)Equality,” *Journal of Public Economics*, 2011, *95* (7), 488–499.
- Alvaredo, Facundo, Anthony Barnes Atkinson, Thomas Piketty, and Emmanuel Saez**, *The World Top Incomes Database* 2011.
- Anderson, Michael L**, “Multiple Inference and Gender Differences in the Effects of Early Intervention: A Reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects,” *Journal of the American Statistical Association*, 2008, *103* (484), 1481–1495.
- Angrist, Joshua D and Jörn-Steffen Pischke**, *Mostly Harmless Econometrics: An Empiricist’s Companion*, Princeton university press, 2008.
- Atkinson, Anthony B and Salvatore Morelli**, “Chartbook of Economic Inequality,” *ECINEQ WP*, 2014, *324*.
- Becker, Anke, Thomas Dohmen, Benjamin Enke, and Armin Falk**, “The Ancient Origins of the Cross-Country Heterogeneity in Risk Preferences,” *Working Paper*, 2016.
- Benabou, Roland and Efe A Ok**, “Social Mobility and the Demand for Redistribution: the POUM Hypothesis,” *The Quarterly Journal of Economics*, 2001, *116* (2), 447–487.
- and **Jean Tirole**, “Belief in a Just World and Redistributive Politics,” *The Quarterly Journal of Economics*, 2006, *121* (2), 699–746.
- Benjamini, Yoav, Abba M Krieger, and Daniel Yekutieli**, “Adaptive Linear Step-up Procedures that Control the False Discovery Rate,” *Biometrika*, 2006, *93* (3), 491–507.



- Cameron, A Colin and Douglas L Miller**, “A Practitioner’s Guide to Cluster-Robust Inference,” *Journal of Human Resources*, 2015, 50 (2), 317–372.
- Campbell, John Y**, “A Comment on James M. Poterba’s ‘Demographic Structure and Asset Returns’,” *Review of Economics and Statistics*, 2001, 83 (4), 585–588.
- Cappelen, Alexander W, Astri Drange Hole, Erik Ø Sørensen, and Bertil Tungodden**, “The Pluralism of Fairness Ideals: An Experimental Approach,” *The American Economic Review*, 2007, 97 (3), 818–827.
- , **James Konow, Erik Ø Sørensen, and Bertil Tungodden**, “Just Luck: An Experimental Study of Risk-taking and Fairness,” *The American Economic Review*, 2013, 103 (4), 1398–1413.
- , **Karl O Moene, Erik Ø Sørensen, and Bertil Tungodden**, “Needs versus Entitlements—an International Fairness Experiment,” *Journal of the European Economic Association*, 2013, 11 (3), 574–598.
- , **Trond Halvorsen, Erik Sorensen, and Bertil Tungodden**, “Face-saving or Fair-minded: What Motivates Moral Behavior?,” *Journal of the European Economic Association*, *forthcoming*, 2017.
- Carreri, Maria and Edoardo Teso**, “Economic Recessions and Congressional Preferences for Redistribution,” *Working Paper*, 2017.
- Charité, Jimmy, Raymond Fisman, and Ilyana Kuziemko**, “Reference Points and Redistributive Preferences: Experimental Evidence,” *National Bureau of Economic Research*, 2015.
- Chen, Yuyu, Hui Wang, and David Y Yang**, “Salience of History and the Preference for Redistribution,” *Available at SSRN 2717651*, 2016.
- Coppock, Alexander and Donald P Green**, “Is Voting Habit Forming? New Evidence Suggests that Habit-Formation Varies by Election Type,” *American Journal of Political Science*, *forthcoming*, 2017.
- Cruces, Guillermo, Ricardo Perez-Truglia, and Martin Tetaz**, “Biased Perceptions of Income Distribution and Preferences for Redistribution: Evidence from a Survey Experiment,” *Journal of Public Economics*, 2013, 98, 100–112.

- Dohmen, Thomas, Armin Falk, David Huffman, and Uwe Sunde**, “The Intergenerational Transmission of Risk and Trust Attitudes,” *The Review of Economic Studies*, 2011, 79 (2), 645–677.
- Durante, Ruben, Louis Putterman, and Joël Weele**, “Preferences for Redistribution and Perception of Fairness: An Experimental Study,” *Journal of the European Economic Association*, 2014, 12 (4), 1059–1086.
- Fehr, Ernst and Klaus M Schmidt**, “A Theory of Fairness, Competition, and Cooperation,” *The Quarterly Journal of Economics*, 1999, 114 (3), 817–868.
- Fong, Christina**, “Social Preferences, Self-interest, and the Demand for Redistribution,” *Journal of Public Economics*, 2001, 82 (2), 225–246.
- Fuchs-Schuendeln, Nicola and Matthias Schuendeln**, “On the Endogeneity of Political Preferences: Evidence from Individual Experience with Democracy,” *Science*, 2015, 347 (6226), 1145–1148.
- Giuliano, Paola and Antonio Spilimbergo**, “Growing up in a Recession,” *The Review of Economic Studies*, 2014, 81 (2), 787–817.
- Hertwig, Ralph, Greg Barron, Elke U Weber, and Ido Erev**, “Decisions from Experience and the Effect of Rare Events in Risky Choice,” *Psychological Science*, 2004, 15 (8), 534–539.
- Herz, Holger and Dmitry Taubinsky**, “What Makes a Price Fair? An Experimental Study of Transaction Experience and Endogenous Fairness Views,” *Journal of the European Economic Association*, 2017, 16 (2), 316–352.
- Huber, John and Ronald Inglehart**, “Expert Interpretations of Party Space and Party Locations in 42 Societies,” *Party Politics*, 1995, 1 (1), 73–111.
- Karadja, Mounir, Johanna Mollerstrom, and David Seim**, “Richer (and Holier) Than Thou? The Effect of Relative Income Improvements on Demand for Redistribution,” *Review of Economics and Statistics*, 2017.
- Kenworthy, Lane and Leslie McCall**, “Inequality, Public Opinion and Redistribution,” *Socio-Economic Review*, 2008, 6 (1), 35–68.
- Kerr, William R**, “Income Inequality and Social Preferences for Redistribution and Compensation Differentials,” *Journal of Monetary Economics*, 2014, 66, 62–78.

- Kiatpongsan, Sorapop and Michael I Norton**, “How Much (More) Should CEOs Make? A Universal Desire for More Equal Pay,” *Perspectives on Psychological Science*, 2014, 9 (6), 587–593.
- Kling, Jeffrey R, Jens Ludwig, and Lawrence F Katz**, “Neighborhood Effects on Crime for Female and Male Youth: Evidence from a Randomized Housing Voucher Experiment,” *The Quarterly Journal of Economics*, 2005, pp. 87–130.
- Kosse, Fabian, Thomas Deckers, Hannah Schildberg-Hörisch, and Armin Falk**, “The Formation of Prosociality: Causal Evidence on the Role of Social Environment,” Technical Report, Institute for the Study of Labor (IZA) 2016.
- Krosnick, Jon A and Duane F Alwin**, “Aging and Susceptibility to Attitude Change,” *Journal of Personality and Social Psychology*, 1989, 57 (3), 416.
- Kuziemko, Ilyana, Michael I Norton, Emmanuel Saez, and Stefanie Stantcheva**, “How Elastic are Preferences for Redistribution? Evidence from Randomized Survey Experiments,” *The American Economic Review*, 2015, 105 (4), 1478–1508.
- Luttmer, Erzo FP and Monica Singhal**, “Culture, Context, and the Taste for Redistribution,” *American Economic Journal: Economic Policy*, 2011, 3 (1), 157–179.
- Malmendier, Ulrike and Leslie S Shen**, “Scarred Consumption,” *Working Paper*, 2016.
- **and Stefan Nagel**, “Depression Babies: Do Macroeconomic Experiences Affect Risk Taking?,” *The Quarterly Journal of Economics*, 2011, 126 (1), 373–416.
- **and —**, “Learning from Inflation Experiences,” *The Quarterly Journal of Economics*, 2016, 131 (1), 53–87.
- Mannheim, Karl**, “The Problem of Generations,” *Psychoanalytic Review*, 1970, 57 (3), 378.
- Meltzer, Allan H and Scott F Richard**, “A Rational Theory of the Size of Government,” *Journal of Political Economy*, 1981, 89 (5), 914–927.
- Nisbett, Richard E and Lee Ross**, “Human Inference: Strategies and Shortcomings of Social Judgment,” 1980.
- Norton, Michael I and Dan Ariely**, “Building a Better America—One Wealth Quintile at a Time,” *Perspectives on Psychological Science*, 2011, 6 (1), 9–12.

- Nunn, Nathan**, “Culture and the Historical Process,” *Economic History of Developing Regions*, 2012, 27 (sup1), S108–S126.
- and **Leonard Wantchekon**, “The Slave Trade and the Origins of Mistrust in Africa,” *The American Economic Review*, 2011, 101 (7), 3221–3252.
- Pan, Jennifer and Yiqing Xu**, “China’s Ideological Spectrum,” *MIT Political Science Department Research Paper*, 2015.
- Persson, Torsten and Guido Tabellini**, “Is Inequality Harmful for Growth?,” *The American Economic Review*, 1994, pp. 600–621.
- Piketty, Thomas**, “Social Mobility and Redistributive Politics,” *The Quarterly Journal of Economics*, 1995, pp. 551–584.
- , “Capital in the 21st Century,” 2014.
- Rao, Gautam**, “Familiarity Does not Breed Contempt: Diversity, Discrimination and Generosity in Delhi Schools,” *American Economic Review (forthcoming)*, 2018.
- Roland, Gerard and David Y Yang**, “China’s Lost Generation: Changes in Beliefs and their Intergenerational Transmission,” *Working Paper*, 2016.
- Roth, Christopher and Johannes Wohlfart**, “Public Debt and the Demand for Government Spending and Taxation,” *Working Paper*, 2018.
- Schildberg-Hörisch, Hannah, Thomas Deckers, Armin Falk, and Fabian Kosse**, “How Does Socio-Economic Status Shape a Child’s Personality?,” *Working Paper*, 2014.
- Simonsohn, Uri, Niklas Karlsson, George Loewenstein, and Dan Ariely**, “The Tree of Experience in the Forest of Information: Overweighing Experienced Relative to Observed Information,” *Games and Economic Behavior*, 2008, 62 (1), 263–286.
- Weber, Elke U, Ulf Böckenholt, Denis J Hilton, and Brian Wallace**, “Determinants of Diagnostic Hypothesis Generation: Effects of Information, Base Rates, and Experience,” *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 1993, 19 (5), 1151.

# Main Tables

Table 1: Main Results: General Social Survey (US)

|                                      | (1)                   | (2)                  | (3)                 | (4)                    | (5)                    | (6)                    |
|--------------------------------------|-----------------------|----------------------|---------------------|------------------------|------------------------|------------------------|
|                                      | Help poor             | Pro welfare          | Success due to luck | Liberal                | Party: Democrat        | Voted: Democrat        |
| <b>Panel A</b>                       |                       |                      |                     |                        |                        |                        |
| Inequality Experiences               | -0.0370**<br>(0.0147) | -0.0234*<br>(0.0126) | -0.0147<br>(0.0112) | -0.0383***<br>(0.0123) | -0.0476***<br>(0.0126) | -0.0414***<br>(0.0129) |
| FDR-adjusted p-values                | [.009]***             | [.027]**             | [.067]*             | [.004]***              | [.001]***              | [.004]***              |
| Observations                         | 23,199                | 26,135               | 29,083              | 40,136                 | 46,327                 | 32,907                 |
| R-squared                            | 0.108                 | 0.128                | 0.024               | 0.078                  | 0.146                  | 0.200                  |
| Age FE                               | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| Year FE                              | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| Cohort group FE                      | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| Census div FE                        | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| Unemployment Experiences             | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| Demographic controls                 | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| <b>Panel B</b>                       |                       |                      |                     |                        |                        |                        |
| Inequality Experiences<br>(Regional) | -0.0415**<br>(0.0179) | -0.0268*<br>(0.0138) | -0.0142<br>(0.0111) | -0.0598***<br>(0.0134) | -0.0522***<br>(0.0123) | -0.0377***<br>(0.0141) |
| FDR-adjusted p-values                | [.022]**              | [.045]**             | [.075]*             | [.002]***              | [.001]**               | [.002]**               |
| Observations                         | 22,987                | 25,831               | 28,670              | 39,632                 | 45,703                 | 32,597                 |
| R-squared                            | 0.139                 | 0.159                | 0.054               | 0.099                  | 0.170                  | 0.226                  |
| Census div 16 FE x Age FE            | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| Census div 16 FE x Year FE           | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| Census div 16 FE x Cohort group FE   | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| Census div FE                        | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| Unemployment Experiences             | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| Demographic controls                 | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |

Standard errors two-way clustered by age and cohort are displayed in parentheses. The p-values adjusted for a false discovery rate of five percent are presented in brackets. Inequality experiences in Panel A are based on the experienced national-level share of total income earned by the top 5 percent during the impressionable years. Inequality experiences in Panel B are based on the experienced regional-level share of total income earned by the top 5 percent during the impressionable years. Unemployment experiences are based on the experienced national unemployment rate during the impressionable years. All specifications in Panel A control for age fixed effects, year fixed effects, cohort group fixed effects, as well as region fixed effects. In Panel B, we control for age fixed effects and cohort group fixed effects interacted with census division at age 16 fixed effects and we also control for current census division fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table 2: Main Results: German General Social Survey (Allbus)

|                          | (1)                   | (2)  | (3)                         | (4)                    | (5)                        | (6)                   |
|--------------------------|-----------------------|--|-----------------------------|------------------------|----------------------------|-----------------------|
|                          | Inequality:<br>Unfair | Inequality does not<br>increase motivation | Inequality<br>reflects luck | Left-wing              | Intention to Vote:<br>Left | Voted: Left           |
| Inequality Experiences   | -0.0543*<br>(0.0307)  | -0.0428<br>(0.0296)                        | -0.0684*<br>(0.0349)        | -0.0957***<br>(0.0196) | -0.0836***<br>(0.0298)     | -0.0961**<br>(0.0457) |
| FDR-adjusted p-values    | [.065]*               | [.08]*                                     | [.053]*                     | [.001]***              | [.013]**                   | [.049]***             |
| Observations             | 10,401                | 10,357                                     | 10,309                      | 18,979                 | 14,691                     | 9,533                 |
| R-squared                | 0.071                 | 0.044                                      | 0.068                       | 0.080                  | 0.109                      | 0.111                 |
| Age FE                   | Yes                   | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |
| Year FE                  | Yes                   | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |
| Cohort group FE          | Yes                   | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |
| Region FE                | Yes                   | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |
| Unemployment Experiences | Yes                   | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |
| Demographic controls     | Yes                   | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |

Standard errors two-way clustered by age and cohort are displayed in parentheses. The p-values adjusted for a false discovery rate of five percent are presented in brackets. Inequality experiences are based on the experienced share of total income earned by the top 5 percent during the impressionable years. Unemployment experiences are based on the experienced national unemployment rate during the impressionable years. All specifications control for age fixed effects, year fixed effects, cohort group fixed effects as well as region fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table 3: Main Results: European Social Survey

|                              | (1)                       | (2)              | (3)                |
|------------------------------|---------------------------|------------------|--------------------|
|                              | <b>Pro-redistribution</b> | <b>Left-wing</b> | <b>Voted: Left</b> |
| Inequality Experiences       | -0.0390*                  | -0.117***        | -0.121***          |
|                              | (0.0234)                  | (0.0200)         | (0.0389)           |
| FDR-adjusted p-values        | [.096]*                   | [.001]***        | [.002]***          |
| Observations                 | 85,529                    | 81,167           | 25,462             |
| R-squared                    | 0.143                     | 0.079            | 0.153              |
| Country FE x Age trends      | Yes                       | Yes              | Yes                |
| Country FE x Year FE         | Yes                       | Yes              | Yes                |
| Country FE x Cohort group FE | Yes                       | Yes              | Yes                |
| Unemployment Experiences     | Yes                       | Yes              | Yes                |
| Demographic controls         | Yes                       | Yes              | Yes                |

Standard errors two-way clustered by age and cohort are displayed in parentheses. The p-values adjusted for a false discovery rate of five percent are presented in brackets. Inequality experiences are based on the experienced share of total national income earned by the top 5 percent during the impressionable years. Unemployment experiences are based on the experienced unemployment rate during the impressionable years. All specifications control for age trends, year fixed effects and cohort group fixed effects, each interacted with country fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table 4: Heterogeneous Effects: General Social Survey (GSS)

|  | (1)                  | (2)                  | (3)                  | (4)                  |
|--|----------------------|----------------------|----------------------|----------------------|
|  | AES                  | AES                  | AES                  | AES                  |
| Inequality Experiences                                     | -.0213***<br>[0.001] | -.0435***<br>[0.000] | -.0278***<br>[0.000] | -0.0291**<br>[0.010] |
| Inequality Experiences $\times$ High relative income at 16 | -.0104<br>[0.128]    |                      |                      |                      |
| Inequality Experiences $\times$ High father's education    |                      | .008<br>[0.336]      |                      |                      |
| Inequality Experiences $\times$ High relative income       |                      |                      | -.0114<br>[0.120]    |                      |
| Inequality Experiences $\times$ High education             |                      |                      |                      | -.006<br>[0.401]     |
| Observations   | 25,078               | 24,818               | 30,271               | 31,919               |
| Age FE   | Yes                  | Yes                  | Yes                  | Yes                  |
| Year FE  | Yes                  | Yes                  | Yes                  | Yes                  |
| Cohort group FE  | Yes                  | Yes                  | Yes                  | Yes                  |
| Region FE  | Yes                  | Yes                  | Yes                  | Yes                  |
| Unemployment Experiences                                   | Yes                  | Yes                  | Yes                  | Yes                  |
| Demographic controls                                       | Yes                  | Yes                  | Yes                  | Yes                  |

P-values from simultaneous estimation clustered by cohort are displayed in parentheses. The number of observations refers to the average number used for the estimation of a given AES. Inequality experiences are based on the experienced share of total income earned by the top 5 percent during the impressionable years. Unemployment experiences are based on the experienced national unemployment rate during the impressionable years. All specifications control for age fixed effects, year fixed effects, cohort group fixed effects as well as region fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .



Table 5: Heterogeneous Effects: German General Social Survey (Allbus)

|   | (1)                  | (2)                  | (3)                  |
|---|----------------------|----------------------|----------------------|
|   | AES                  | AES                  | AES                  |
| Inequality Experiences                                  | -.0744***<br>[0.000] | -.0691***<br>[0.005] | -.0681***<br>[0.000] |
| Inequality Experiences $\times$ High father's education | .0059<br>[0.769]     |                      |                      |
| Inequality Experiences $\times$ High relative income    |                      | -.0177<br>[0.353]    |                      |
| Inequality Experiences $\times$ High education          |                      |                      | -.0204<br>[0.375]    |
| Observations  | 14,052               | 10,308               | 14,122               |
| Age FE  | Yes                  | Yes                  | Yes                  |
| Year FE   | Yes                  | Yes                  | Yes                  |
| Cohort group FE   | Yes                  | Yes                  | Yes                  |
| Region FE   | Yes                  | Yes                  | Yes                  |
| Unemployment Experiences                                | Yes                  | Yes                  | Yes                  |
| Demographic controls                                    | Yes                  | Yes                  | Yes                  |

P-values from simultaneous estimation clustered by cohort are displayed in parentheses. The number of observations refers to the average number used for the estimation of a given AES (average effect size). Inequality experiences are based on the experienced share of total income earned by the top 5 percent during the impressionable years. Unemployment experiences are based on the experienced national unemployment rate during the impressionable years. All specifications control for age fixed effects, year fixed effects, cohort group fixed effects as well as region fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table 6: Other outcomes: GSS, Allbus, and ESS

|                          | (1)                                 | (2)                            | (3)                            | (4)                         | (5)                          | (6)                      |
|--------------------------|-------------------------------------|--------------------------------|--------------------------------|-----------------------------|------------------------------|--------------------------|
|                          | <u>GSS (national inequ. exper.)</u> |                                | <u>Allbus</u>                  |                             | <u>ESS</u>                   |                          |
|                          | <b>Low relative<br/>income</b>      | <b>Low social<br/>position</b> | <b>Low social<br/>position</b> | <b>Trust<br/>parliament</b> | <b>Trust<br/>politicians</b> | <b>Trust<br/>parties</b> |
| Inequality Experiences   | 0.00340<br>(0.0121)                 | 0.00467<br>(0.0118)            | -0.0368<br>(0.0234)            | 0.0168<br>(0.0191)          | 0.0169<br>(0.0255)           | 0.0283<br>(0.0242)       |
| Observations             | 43,234                              | 44,402                         | 15,025                         | 81,933                      | 82,270                       | 69,406                   |
| R-squared                | 0.257                               | 0.205                          | 0.204                          | 0.163                       | 0.193                        | 0.208                    |
| Age FE                   | Yes                                 | Yes                            | Yes                            | Yes                         | Yes                          | Yes                      |
| Year FE                  | Yes                                 | Yes                            | Yes                            | Yes                         | Yes                          | Yes                      |
| Cohort group FE          | Yes                                 | Yes                            | Yes                            | Yes                         | Yes                          | Yes                      |
| Region FE                | Yes                                 | Yes                            | Yes                            | Yes                         | Yes                          | Yes                      |
| Unemployment Experiences | Yes                                 | Yes                            | Yes                            | Yes                         | Yes                          | Yes                      |
| Demographic controls     | Yes                                 | Yes                            | Yes                            | Yes                         | Yes                          | Yes                      |

Standard errors two-way clustered by age and cohort are displayed in parentheses. Inequality experiences are based on the experienced share of total income earned by the top 5 percent during the impressionable years. Unemployment experiences are based on the experienced national unemployment rate during the impressionable years. The estimations on the GSS and the Allbus control for age fixed effects, year fixed effects, cohort group fixed effects as well as regions fixed effects. The estimations on the ESS control for age trends, year fixed effects and cohort group fixed effects, each interacted with country fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

## Main Figures

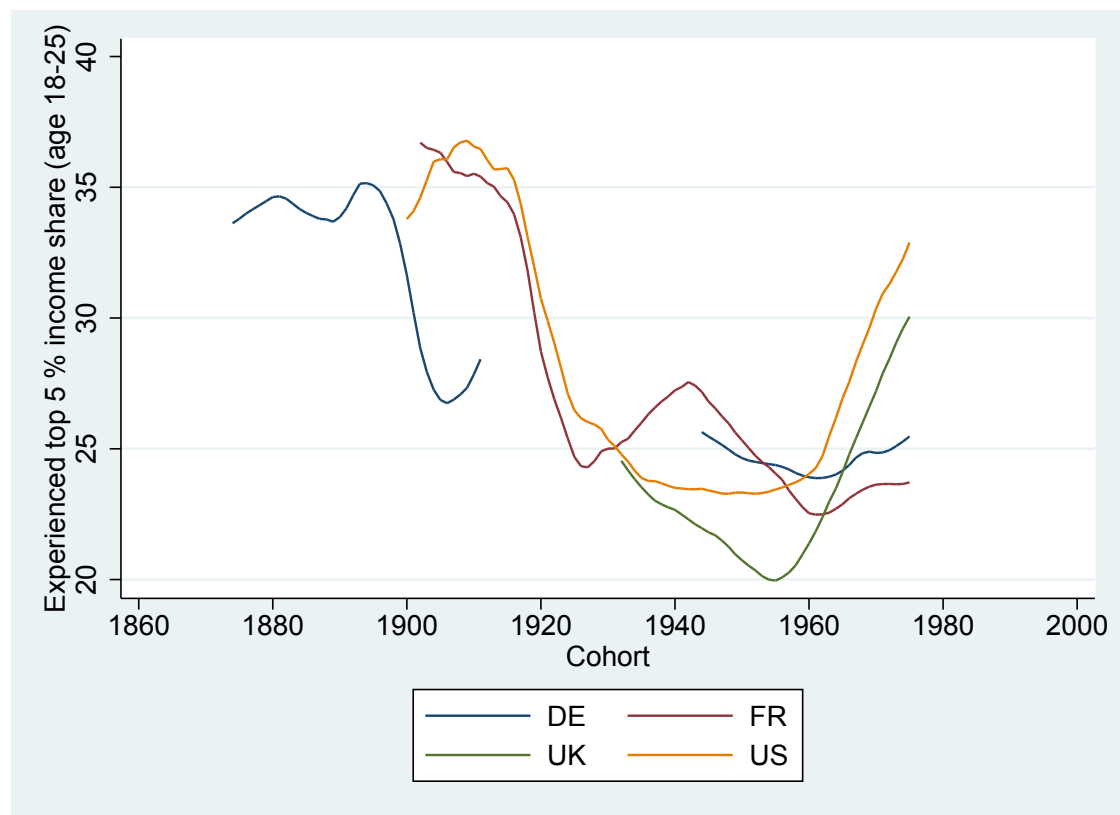


Figure 1: Experienced top 5 percent income share (age 18-25) against cohort across countries. Source: World Wealth and Income Database (Alvaredo et al., 2011).

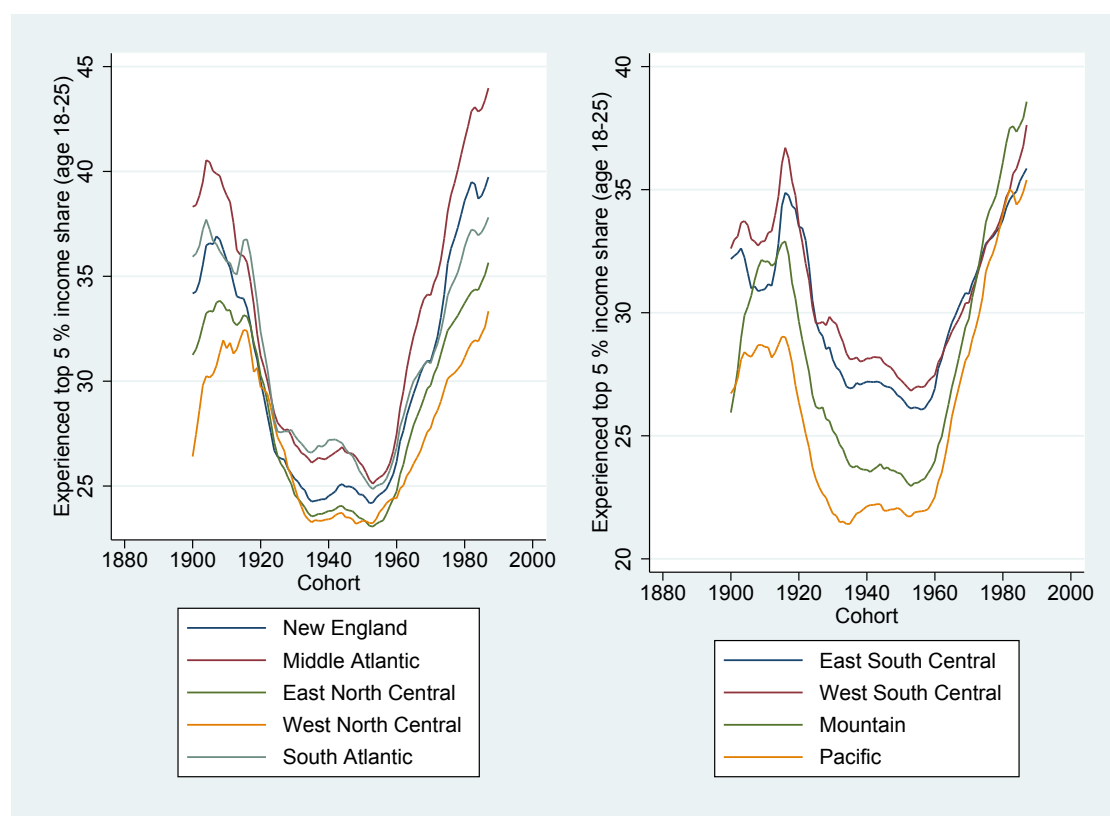


Figure 2: Experienced top 5 percent income share (age 18-25) against cohort across US census divisions. Source: World Wealth and Income Database (Alvaredo et al., 2011).

# Online Appendix: Experienced Inequality and Preferences for Redistribution

Christopher Roth and Johannes Wohlfart

## A Additional Tables

Table A.1: GSS: National Inequality Experiences during Other Periods of Life

|                                       | (1)                    | (2)                   | (3)                  | (4)                     | (5)                     | (6)                    |
|---------------------------------------|------------------------|-----------------------|----------------------|-------------------------|-------------------------|------------------------|
|                                       | Help poor              | Pro welfare           | Success due to luck  | Liberal                 | Party: Democrat         | Voted: Democrat        |
| <b>Panel A: 2 to 9</b>                |                        |                       |                      |                         |                         |                        |
| Inequality Experiences                | -0.0269<br>(0.0332)    | -0.0313<br>(0.0253)   | 0.0358<br>(0.0362)   | -0.106***<br>(0.0327)   | -0.0309<br>(0.0369)     | 0.00160<br>(0.0361)    |
| Observations                          | 21,998                 | 23,703                | 26,806               | 37,492                  | 42,790                  | 30,219                 |
| <b>Panel B: 10 to 17</b>              |                        |                       |                      |                         |                         |                        |
| Inequality Experiences                | -0.0588**<br>(0.0232)  | -0.0361*<br>(0.0207)  | -0.00608<br>(0.0227) | -0.0533**<br>(0.0212)   | -0.0346<br>(0.0215)     | -0.0502**<br>(0.0215)  |
| Observations                          | 22,881                 | 25,299                | 28,331               | 39,313                  | 45,158                  | 32,054                 |
| <b>Panel C: 18 to 25 (main)</b>       |                        |                       |                      |                         |                         |                        |
| Inequality Experiences                | -0.0370**<br>(0.0147)  | -0.0234*<br>(0.0126)  | -0.0147<br>(0.0112)  | -0.0383***<br>(0.0123)  | -0.0476***<br>(0.0126)  | -0.0414***<br>(0.0129) |
| Observations                          | 23,199                 | 26,135                | 29,083               | 40,136                  | 46,327                  | 32,907                 |
| <b>Panel D: 26 to 33</b>              |                        |                       |                      |                         |                         |                        |
| Inequality Experiences                | -0.0403***<br>(0.0144) | -0.0279**<br>(0.0119) | -0.00735<br>(0.0111) | -0.0422***<br>(0.00920) | -0.0664***<br>(0.00972) | -0.0422***<br>(0.0131) |
| Observations                          | 18,663                 | 20,942                | 23,487               | 32,320                  | 37,467                  | 27,738                 |
| <b>Panel E: 34 to 41</b>              |                        |                       |                      |                         |                         |                        |
| Inequality Experiences                | -0.00458<br>(0.0254)   | -0.0206<br>(0.0183)   | -0.0183<br>(0.0186)  | 0.0235<br>(0.0174)      | -0.0831***<br>(0.0189)  | -0.0626***<br>(0.0203) |
| Observations                          | 14,181                 | 16,070                | 18,015               | 24,608                  | 28,798                  | 21,873                 |
| <b>Panel F: 42 to 49</b>              |                        |                       |                      |                         |                         |                        |
| Inequality Experiences                | 0.0369<br>(0.0331)     | -0.0174<br>(0.0229)   | -0.0278<br>(0.0186)  | 0.0473***<br>(0.0182)   | -0.0544***<br>(0.0178)  | -0.0230<br>(0.0178)    |
| Observations                          | 10,325                 | 11,821                | 13,253               | 17,976                  | 21,124                  | 16,363                 |
| <b>Panel G: Life-time experiences</b> |                        |                       |                      |                         |                         |                        |
| $\lambda = -1$                        |                        |                       |                      |                         |                         |                        |
| Inequality Experiences                | -0.0463***<br>(0.0140) | -0.0162<br>(0.0163)   | -0.00953<br>(0.0133) | -0.0224<br>(0.0149)     | -0.0359***<br>(0.0116)  | -0.0256**<br>(0.0130)  |
| Observations                          | 23,199                 | 26,135                | 29,083               | 40,136                  | 46,327                  | 32,907                 |
| Age FE                                | Yes                    | Yes                   | Yes                  | Yes                     | Yes                     | Yes                    |
| Year FE                               | Yes                    | Yes                   | Yes                  | Yes                     | Yes                     | Yes                    |
| Cohort group FE                       | Yes                    | Yes                   | Yes                  | Yes                     | Yes                     | Yes                    |
| Census div FE                         | Yes                    | Yes                   | Yes                  | Yes                     | Yes                     | Yes                    |
| Unemployment Experiences              | Yes                    | Yes                   | Yes                  | Yes                     | Yes                     | Yes                    |
| Demographic controls                  | Yes                    | Yes                   | Yes                  | Yes                     | Yes                     | Yes                    |

Standard errors two-way clustered by age and cohort are displayed in parentheses. Inequality experiences are based on the national level experienced share of total income earned by the top 5 percent during different life periods. Unemployment experiences are based on the experienced national unemployment rate during the different life periods. We control for age fixed effects, year fixed effects, cohort group fixed effects as well as region fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. In Panel G we display the results on the effect of life-time inequality experiences based on the methodology developed by Malmendier and Nagel (2011). We use a weighting factor of  $\lambda = -1$ . \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A.2: GSS: Regional Inequality Experiences during Other Periods of Life

|                                      | (1)                   | (2)                    | (3)                  | (4)                    | (5)                    | (6)                    |
|--------------------------------------|-----------------------|------------------------|----------------------|------------------------|------------------------|------------------------|
|                                      | Help poor             | Pro welfare            | Success due to luck  | Liberal                | Party: Democrat        | Voted: Democrat        |
| <b>Panel A: 2 to 9</b>               |                       |                        |                      |                        |                        |                        |
| Inequality Experiences<br>(Regional) | -0.0398<br>(0.0338)   | -0.0478*<br>(0.0252)   | 0.0201<br>(0.0243)   | -0.0903***<br>(0.0213) | -0.0534**<br>(0.0247)  | -0.00692<br>(0.0271)   |
| Observations                         | 21,829                | 23,460                 | 26,458               | 37,063                 | 42,270                 | 29,970                 |
| <b>Panel B: 10 to 17</b>             |                       |                        |                      |                        |                        |                        |
| Inequality Experiences<br>(Regional) | -0.0287<br>(0.0188)   | -0.00502<br>(0.0210)   | -0.00782<br>(0.0215) | -0.0381**<br>(0.0168)  | -0.00525<br>(0.0146)   | -0.0333*<br>(0.0174)   |
| Observations                         | 22,704                | 25,037                 | 27,963               | 38,865                 | 44,603                 | 31,784                 |
| <b>Panel C: 18 to 25 (main)</b>      |                       |                        |                      |                        |                        |                        |
| Inequality Experiences<br>(Regional) | -0.0415**<br>(0.0179) | -0.0268*<br>(0.0138)   | -0.0142<br>(0.0111)  | -0.0598***<br>(0.0134) | -0.0522***<br>(0.0123) | -0.0377***<br>(0.0141) |
| Observations                         | 22,987                | 25,831                 | 28,670               | 39,632                 | 45,703                 | 32,597                 |
| <b>Panel D: 26 to 33</b>             |                       |                        |                      |                        |                        |                        |
| Inequality Experiences<br>(Regional) | -0.0384**<br>(0.0165) | -0.0406***<br>(0.0150) | -0.00866<br>(0.0135) | -0.0509***<br>(0.0115) | -0.0696***<br>(0.0105) | -0.0377***<br>(0.0142) |
| Observations                         | 18,500                | 20,699                 | 23,162               | 31,916                 | 36,956                 | 27,455                 |
| <b>Panel E: 34 to 41</b>             |                       |                        |                      |                        |                        |                        |
| Inequality Experiences<br>(Regional) | 0.00763<br>(0.0249)   | -0.0125<br>(0.0174)    | -0.0244<br>(0.0181)  | 0.00213<br>(0.0161)    | -0.0581***<br>(0.0177) | -0.0527***<br>(0.0189) |
| Observations                         | 14,065                | 15,880                 | 17,767               | 24,303                 | 28,403                 | 21,631                 |
| <b>Panel F: 42 to 49</b>             |                       |                        |                      |                        |                        |                        |
| Inequality Experiences<br>(Regional) | 0.0550<br>(0.0425)    | -0.0183<br>(0.0271)    | -0.0282<br>(0.0242)  | 0.0485***<br>(0.0186)  | -0.0470**<br>(0.0232)  | -0.00858<br>(0.0237)   |
| Observations                         | 10,236                | 11,674                 | 13,067               | 17,745                 | 20,826                 | 16,165                 |
| Census div 16 FE x Age FE            | Yes                   | Yes                    | Yes                  | Yes                    | Yes                    | Yes                    |
| Census div 16 FE x Year FE           | Yes                   | Yes                    | Yes                  | Yes                    | Yes                    | Yes                    |
| Census div 16 FE x Cohort group FE   | Yes                   | Yes                    | Yes                  | Yes                    | Yes                    | Yes                    |
| Census div FE                        | Yes                   | Yes                    | Yes                  | Yes                    | Yes                    | Yes                    |
| Unemployment Experiences             | Yes                   | Yes                    | Yes                  | Yes                    | Yes                    | Yes                    |
| Demographic controls                 | Yes                   | Yes                    | Yes                  | Yes                    | Yes                    | Yes                    |

Standard errors two-way clustered by age and cohort are displayed in parentheses. Inequality experiences are based on the regional experienced share of total income earned by the top 5 percent during the different periods of life. Unemployment experiences are based on the experienced national unemployment rate during the different periods of life. We control for age fixed effects, year fixed effects and cohort group fixed effects, each interacted with census division at age 16 fixed effects and we also control for current census division fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A.3: Allbus: Inequality Experiences during Other Periods of Life

|                                       | (1)                   | (2)  | (3)                         | (4)                     | (5)                        | (6)                   |
|---------------------------------------|-----------------------|--|-----------------------------|-------------------------|----------------------------|-----------------------|
|                                       | Inequality:<br>Unfair | Inequality does not<br>increase motivation | Inequality<br>reflects luck | Left-wing               | Intention to Vote:<br>Left | Voted: Left           |
| <b>Panel A: 2 to 9</b>                |                       |  |                             |                         |                            |                       |
| Inequality Experiences                | 0.0502<br>(0.0898)    | -0.0671<br>(0.0677)                        | 0.00994<br>(0.0571)         | 0.0205<br>(0.0541)      | 0.0672**<br>(0.0329)       | 0.0455<br>(0.0528)    |
| Observations                          | 7,506                 | 7,427                                      | 7,408                       | 14,072                  | 10,940                     | 6,855                 |
| <b>Panel B: 10 to 17</b>              |                       |  |                             |                         |                            |                       |
| Inequality Experiences                | -0.137***<br>(0.0483) | -0.0555<br>(0.0454)                        | -0.112***<br>(0.0331)       | -0.0358<br>(0.0287)     | -0.120***<br>(0.0232)      | -0.148***<br>(0.0408) |
| Observations                          | 8,942                 | 8,885                                      | 8,852                       | 16,248                  | 12,524                     | 8,023                 |
| <b>Panel C: 18 to 25 (main)</b>       |                       |  |                             |                         |                            |                       |
| Inequality Experiences                | -0.0543*<br>(0.0307)  | -0.0428<br>(0.0296)                        | -0.0684*<br>(0.0349)        | -0.0957***<br>(0.0196)  | -0.0836***<br>(0.0298)     | -0.0961**<br>(0.0457) |
| Observations                          | 10,401                | 10,357                                     | 10,309                      | 18,979                  | 14,691                     | 9,533                 |
| <b>Panel D: 26 to 33</b>              |                       |  |                             |                         |                            |                       |
| Inequality Experiences                | -0.00389<br>(0.0171)  | 0.00454<br>(0.0203)                        | -0.00287<br>(0.0183)        | -0.0196*<br>(0.0101)    | -0.00724<br>(0.0145)       | -0.00974<br>(0.0157)  |
| Observations                          | 9,740                 | 9,669                                      | 9,628                       | 17,462                  | 13,758                     | 9,123                 |
| <b>Panel E: 34 to 41</b>              |                       |  |                             |                         |                            |                       |
| Inequality Experiences                | 0.0315**<br>(0.0141)  | 0.0222<br>(0.0302)                         | 0.0505***<br>(0.0152)       | -0.0152<br>(0.0116)     | 0.0140<br>(0.0126)         | 0.0432**<br>(0.0171)  |
| Observations                          | 8,411                 | 8,329                                      | 8,300                       | 14,933                  | 11,916                     | 7,989                 |
| <b>Panel F: 42 to 49</b>              |                       |  |                             |                         |                            |                       |
| Inequality Experiences                | -0.00839<br>(0.0297)  | 0.0190<br>(0.0298)                         | 0.0107<br>(0.0163)          | -0.0275<br>(0.0233)     | 0.00227<br>(0.0230)        | -0.0296<br>(0.0202)   |
| Observations                          | 6,826                 | 6,726                                      | 6,710                       | 12,355                  | 9,993                      | 6,685                 |
| <b>Panel G: Life-time experiences</b> |                       |  |                             |                         |                            |                       |
| $\lambda = -1$                        |                       |  |                             |                         |                            |                       |
| Inequality Experiences                | -0.0430**<br>(0.0192) | -0.0532***<br>(0.0188)                     | -0.0698***<br>(0.0232)      | -0.0610***<br>(0.00827) | -0.0845***<br>(0.0181)     | -0.112***<br>(0.0219) |
| Observations                          | 7,556                 | 7,532                                      | 7,499                       | 14,163                  | 10,963                     | 7,249                 |
| Age FE                                | Yes                   | Yes  | Yes                         | Yes                     | Yes                        | Yes                   |
| Year FE                               | Yes                   | Yes  | Yes                         | Yes                     | Yes                        | Yes                   |
| Cohort group FE                       | Yes                   | Yes  | Yes                         | Yes                     | Yes                        | Yes                   |
| Region FE                             | Yes                   | Yes  | Yes                         | Yes                     | Yes                        | Yes                   |
| Unemployment Experiences              | Yes                   | Yes  | Yes                         | Yes                     | Yes                        | Yes                   |
| Demographic controls                  | Yes                   | Yes  | Yes                         | Yes                     | Yes                        | Yes                   |

Standard errors two-way clustered by age and cohort are displayed in parentheses. Inequality experiences are based on the experienced share of total income earned by the top 5 percent during the different periods of life. Unemployment experiences are based on the experienced national unemployment rate during the different periods of life. All specifications control for age fixed effects, year fixed effects, cohort group fixed effects as well as region fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. In Panel G we display the results on the effect of life-time inequality experiences based on the methodology developed by Malmendier and Nagel (2011). We use a weighting factor of  $\lambda = -1$ . All outcome measures are z-scored. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A.4: GSS: Placebos

|                          | (1)                    | (2)                   | (3)                 |
|--------------------------|------------------------|-----------------------|---------------------|
|                          | <b>Pro-immigration</b> | <b>Pro-guns</b>       | <b>God exists</b>   |
| Inequality Experiences   | 0.0329<br>(0.0343)     | -0.000870<br>(0.0104) | 0.00392<br>(0.0112) |
| Observations             | 8,266                  | 30,527                | 15,322              |
| R-squared                | 0.098                  | 0.084                 | 0.301               |
| Age FE                   | Yes                    | Yes                   | Yes                 |
| Year FE                  | Yes                    | Yes                   | Yes                 |
| Cohort group FE          | Yes                    | Yes                   | Yes                 |
| Census div FE            | Yes                    | Yes                   | Yes                 |
| Unemployment Experiences | Yes                    | Yes                   | Yes                 |
| Demographic controls     | Yes                    | Yes                   | Yes                 |

Standard errors are two-way clustered by age and cohort. Inequality experiences are based on the experienced share of total income earned by the top 5 percent during the impressionable years. Unemployment experiences are based on the experienced national unemployment rate during the impressionable years. All specifications control for age fixed effects, year fixed effects, cohort group fixed effects as well as region fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .



Table A.5: Allbus: Placebos

|                          | (1)                    | (2)                 | (3)                           |
|--------------------------|------------------------|---------------------|-------------------------------|
|                          | <b>Pro-immigration</b> | <b>Nationalism</b>  | <b>Nature determines life</b> |
| Inequality Experiences   | -0.0330<br>(0.0272)    | -0.0298<br>(0.0344) | -0.0712<br>(0.0623)           |
| Observations             | 11,057                 | 5,666               | 4,178                         |
| R-squared                | 0.235                  | 0.122               | 0.090                         |
| Age FE                   | Yes                    | Yes                 | Yes                           |
| Year FE                  | Yes                    | Yes                 | Yes                           |
| Cohort group FE          | Yes                    | Yes                 | Yes                           |
| Region FE                | Yes                    | Yes                 | Yes                           |
| Unemployment Experiences | Yes                    | Yes                 | Yes                           |
| Demographic controls     | Yes                    | Yes                 | Yes                           |

Standard errors are two-way clustered by age and cohort. Inequality experiences are based on the experienced share of total income earned by the top 5 percent during the impressionable years. Unemployment experiences are based on the experienced national unemployment rate during the impressionable years. All specifications control for age fixed effects, year fixed effects, cohort group fixed effects as well as region fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A.6: ESS: Placebos

|                              | (1)                    | (2)                       | (3)                   |
|------------------------------|------------------------|---------------------------|-----------------------|
|                              | <b>Pro-immigration</b> | <b>Pro-EU unification</b> | <b>Pro-democratic</b> |
| Inequality Experiences       | -0.00592<br>(0.0213)   | -0.0210<br>(0.0217)       | 0.0419<br>(0.0273)    |
| Observations                 | 81,136                 | 55,907                    | 48,045                |
| R-squared                    | 0.209                  | 0.109                     | 0.070                 |
| Country FE x Age trends      | Yes                    | Yes                       | Yes                   |
| Country FE x Year FE         | Yes                    | Yes                       | Yes                   |
| Country FE x Cohort group FE | Yes                    | Yes                       | Yes                   |
| Unemployment Experiences     | Yes                    | Yes                       | Yes                   |
| Demographic controls         | Yes                    | Yes                       | Yes                   |

Standard errors are two-way clustered by age and cohort. Inequality experiences are based on the experienced share of total income earned by the top 5 percent during the impressionable years. Unemployment experiences are based on the experienced national unemployment rate during the impressionable years. All specifications control for age trends, year fixed effects and cohort group fixed effects, each interacted with country fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A.7: GSS (national): Other Experiences during the Impressionable Years

|                                     | (1)                   | (2)                   | (3)                    | (4)                    | (5)                    | (6)                    |
|-------------------------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|
|                                     | Help poor             | Pro welfare           | Success due to luck    | Liberal                | Party: Democrat        | Voted: Democrat        |
| <b>Panel A: Unemployment (main)</b> |                       |                       |                        |                        |                        |                        |
| Inequality Experiences              | -0.0370**<br>(0.0147) | -0.0234*<br>(0.0126)  | -0.0147<br>(0.0112)    | -0.0383***<br>(0.0123) | -0.0476***<br>(0.0126) | -0.0414***<br>(0.0129) |
| Unemployment Experiences            | 0.00868<br>(0.0158)   | 0.000302<br>(0.00841) | 0.00397<br>(0.00823)   | 0.0177**<br>(0.00823)  | -0.00213<br>(0.00757)  | 0.00609<br>(0.00627)   |
| Observations                        | 23,199                | 26,135                | 29,083                 | 40,136                 | 46,327                 | 32,907                 |
| <b>Panel B: GDP Growth</b>          |                       |                       |                        |                        |                        |                        |
| Inequality Experiences              | -0.0363**<br>(0.0153) | -0.0225**<br>(0.0110) | -0.00855<br>(0.00959)  | -0.0306**<br>(0.0127)  | -0.0455***<br>(0.0103) | -0.0317***<br>(0.0109) |
| Experienced GDP growth              | -0.00925<br>(0.0124)  | 0.00219<br>(0.00620)  | 0.0129<br>(0.00873)    | 0.00119<br>(0.00761)   | 0.00910*<br>(0.00539)  | 0.0203***<br>(0.00707) |
| Observations                        | 23,199                | 26,135                | 29,083                 | 40,136                 | 46,327                 | 32,907                 |
| <b>Panel C: Tax Revenue</b>         |                       |                       |                        |                        |                        |                        |
| Inequality Experiences              | -0.0430**<br>(0.0204) | -0.0123<br>(0.0162)   | -0.0378**<br>(0.0147)  | -0.0668***<br>(0.0179) | -0.0425***<br>(0.0151) | -0.0501**<br>(0.0199)  |
| Experienced Tax Revenue rel to GDP  | -0.0435<br>(0.0957)   | 0.0433<br>(0.0562)    | -0.175***<br>(0.0536)  | -0.159**<br>(0.0632)   | -0.0247<br>(0.0471)    | -0.108*<br>(0.0650)    |
| Observations                        | 22,411                | 24,409                | 27,498                 | 38,335                 | 43,856                 | 31,063                 |
| <b>Panel D: Political Ideology</b>  |                       |                       |                        |                        |                        |                        |
| Inequality Experiences              | -0.0351**<br>(0.0139) | -0.0226**<br>(0.0108) | -0.0113<br>(0.00918)   | -0.0317***<br>(0.0121) | -0.0465***<br>(0.0101) | -0.0370***<br>(0.0123) |
| Experienced Republican President    | 0.0163**<br>(0.00763) | -0.00559<br>(0.00553) | -0.0122**<br>(0.00598) | 0.00726<br>(0.00768)   | -0.0163**<br>(0.00767) | -0.0107<br>(0.00723)   |
| Observations                        | 23,199                | 26,135                | 29,083                 | 40,136                 | 46,327                 | 32,907                 |
| Age FE                              | Yes                   | Yes                   | Yes                    | Yes                    | Yes                    | Yes                    |
| Year FE                             | Yes                   | Yes                   | Yes                    | Yes                    | Yes                    | Yes                    |
| Cohort group FE                     | Yes                   | Yes                   | Yes                    | Yes                    | Yes                    | Yes                    |
| Census div FE                       | Yes                   | Yes                   | Yes                    | Yes                    | Yes                    | Yes                    |
| Unemployment Experiences            | Yes                   | Yes                   | Yes                    | Yes                    | Yes                    | Yes                    |
| Demographic controls                | Yes                   | Yes                   | Yes                    | Yes                    | Yes                    | Yes                    |

Standard errors are two-way clustered by age and cohort. Inequality experiences are based on the national level experienced share of total income earned by the top 5 percent during the impressionable years. Unemployment experiences are based on the experienced unemployment rate during the impressionable years. All specifications control for age fixed effects, year fixed effects, cohort group fixed effects as well as region fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. In Panel A we show the main results. In Panel B, we show the results controlling for experienced growth of real GDP per capita. In Panel C, we control for the experienced size of the government as the experienced ratio of total tax revenue to GDP. In Panel D, we control for the fraction of the impressionable years in which a Republican president was in office. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A.8: Allbus: Other Experiences during the Impressionable Years

|                                     | (1)                    | (2)  | (3)                         | (4)                    | (5)                        | (6)                   |
|-------------------------------------|------------------------|--|-----------------------------|------------------------|----------------------------|-----------------------|
|                                     | Inequality:<br>Unfair  | Inequality does not<br>increase motivation | Inequality<br>reflects luck | Left-wing              | Intention to Vote:<br>Left | Voted: Left           |
| <b>Panel A: Unemployment (main)</b> |                        |  |                             |                        |                            |                       |
| Inequality Experiences              | -0.0544*<br>(0.0307)   | -0.0428<br>(0.0296)                        | -0.0684**<br>(0.0349)       | -0.0956***<br>(0.0196) | -0.0837***<br>(0.0298)     | -0.0962**<br>(0.0456) |
| Unemployment Experiences            | 0.108*<br>(0.0614)     | 0.0293<br>(0.0465)                         | 0.0994*<br>(0.0539)         | 0.00953<br>(0.0337)    | 0.0254<br>(0.0499)         | 0.0949<br>(0.0734)    |
| Observations                        | 10,401                 | 10,357                                     | 10,309                      | 18,979                 | 14,691                     | 9,533                 |
| <b>Panel B: GDP Growth</b>          |                        |  |                             |                        |                            |                       |
| Inequality Experiences              | -0.0891***<br>(0.0215) | -0.0518**<br>(0.0248)                      | -0.105***<br>(0.0276)       | -0.102***<br>(0.0219)  | -0.0952***<br>(0.0277)     | -0.127***<br>(0.0446) |
| Experienced GDP Growth              | 0.00369<br>(0.0341)    | 0.00314<br>(0.0244)                        | -0.0253<br>(0.0305)         | -0.0119<br>(0.0139)    | -0.0131<br>(0.00937)       | -0.0186<br>(0.0231)   |
| Observations                        | 10,401                 | 10,357                                     | 10,309                      | 18,979                 | 14,691                     | 9,533                 |
| <b>Panel C: Tax Revenue</b>         |                        |  |                             |                        |                            |                       |
| Inequality Experiences              | -0.0902***<br>(0.0211) | -0.0725***<br>(0.0246)                     | -0.0968***<br>(0.0251)      | -0.118***<br>(0.0209)  | -0.111***<br>(0.0292)      | -0.130***<br>(0.0498) |
| Experienced Tax Revenue rel to GDP  | 0.111<br>(0.0853)      | 0.144<br>(0.0989)                          | -0.00542<br>(0.0490)        | -0.0157<br>(0.0573)    | -0.0111<br>(0.0824)        | -0.0637<br>(0.112)    |
| <b>Panel D: Political Ideology</b>  |                        |  |                             |                        |                            |                       |
| Inequality Experiences              | -0.0835***<br>(0.0204) | -0.0620**<br>(0.0251)                      | -0.0939***<br>(0.0277)      | -0.121***<br>(0.0224)  | -0.0993***<br>(0.0288)     | -0.129**<br>(0.0518)  |
| Experienced Conservative Chancellor | 0.0139<br>(0.0164)     | 0.0126<br>(0.0134)                         | -0.0104<br>(0.0129)         | 0.00211<br>(0.00987)   | -0.0254*<br>(0.0145)       | -0.0158<br>(0.0241)   |
| Observations                        | 9,974                  | 9,955                                      | 9,902                       | 17,740                 | 13,602                     | 9,046                 |
| Age FE                              | Yes                    | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |
| Year FE                             | Yes                    | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |
| Cohort group FE                     | Yes                    | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |
| Census div FE                       | Yes                    | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |
| Unemployment Experiences            | Yes                    | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |
| Demographic controls                | Yes                    | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |

Standard errors are two-way clustered by age and cohort. Inequality experiences are based on the national level experienced share of total income earned by the top 5 percent during the impressionable years. Unemployment experiences are based on the experienced unemployment rate during the impressionable years. All specifications control for age fixed effects, year fixed effects, cohort group fixed effects as well as region fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. In Panel A we show the main results. In Panel B, we show the results controlling for experienced growth of real GDP per capita. In Panel C, we control for the experienced size of the government as the experienced ratio of total tax revenue to GDP. In Panel D, we control for the fraction of the impressionable years in which a conservative chancellor was in office. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A.9: GSS (national): Controlling for Proxies for Parental Values

|                                     | (1)                   | (2)                  | (3)                 | (4)                    | (5)                    | (6)                    |
|-------------------------------------|-----------------------|----------------------|---------------------|------------------------|------------------------|------------------------|
|                                     | Help poor             | Pro welfare          | Success due to luck | Liberal                | Party: Democrat        | Voted: Democrat        |
| <b>Panel A: Main</b>                |                       |                      |                     |                        |                        |                        |
| Inequality Experiences              | -0.0370**<br>(0.0147) | -0.0234*<br>(0.0126) | -0.0147<br>(0.0112) | -0.0383***<br>(0.0123) | -0.0476***<br>(0.0126) | -0.0414***<br>(0.0129) |
| Observations                        | 23,199                | 26,135               | 29,083              | 40,136                 | 46,327                 | 32,907                 |
| R-squared                           | 0.108                 | 0.128                | 0.024               | 0.078                  | 0.146                  | 0.200                  |
| <b>Panel B: Additional Controls</b> |                       |                      |                     |                        |                        |                        |
| Inequality Experiences              | -0.0376**<br>(0.0146) | -0.0235*<br>(0.0124) | -0.0146<br>(0.0110) | -0.0371***<br>(0.0122) | -0.0485***<br>(0.0119) | -0.0433***<br>(0.0126) |
| Observations                        | 23,199                | 26,135               | 29,083              | 40,136                 | 46,327                 | 32,907                 |
| R-squared                           | 0.112                 | 0.131                | 0.026               | 0.081                  | 0.155                  | 0.204                  |
| Age FE                              | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| Year FE                             | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| Cohort group FE                     | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| Census div FE                       | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| Unemployment Experiences            | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |
| Demographic controls                | Yes                   | Yes                  | Yes                 | Yes                    | Yes                    | Yes                    |

Standard errors two-way clustered by age and cohort are displayed in parentheses. Inequality experiences are based on the experienced national-level share of total income earned by the top 5 percent during the impressionable years. Unemployment experiences are based on the experienced national unemployment rate during the impressionable years. All specifications control for age fixed effects, year fixed effects, cohort group fixed effects, as well as region fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. In Panel B we additionally include the following controls: whether the respondent's father completed at most high school, whether the respondent's father completed college, whether the respondent's mother completed at most high school, whether the respondent's mother completed college, whether the father was self-employed while the respondent grew up, whether the mother worked when the respondent was young, whether the respondent lived in an urban area, whether the family's income was above the median income when the respondent was aged 16 and for census division fixed effects of the respondents' residence at age 16. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A.10: GSS: Robustness (National Inequality Experiences)

|   | (1)                    | (2)                     | (3)                   | (4)                     | (5)                     | (6)                     |
|---|------------------------|-------------------------|-----------------------|-------------------------|-------------------------|-------------------------|
|   | Help poor              | Pro welfare             | Success due to luck   | Liberal                 | Party: Democrat         | Voted: Democrat         |
| <b>Panel A: Main</b>                                |                        |                         |                       |                         |                         |                         |
| Inequality Experiences                              | -0.0370**<br>(0.0147)  | -0.0234*<br>(0.0126)    | -0.0147<br>(0.0112)   | -0.0383***<br>(0.0123)  | -0.0476***<br>(0.0126)  | -0.0414***<br>(0.0129)  |
| Observations  | 23,199                 | 26,135                  | 29,083                | 40,136                  | 46,327                  | 32,907                  |
| <b>Panel B: Top 1 percent</b>                       |                        |                         |                       |                         |                         |                         |
| Inequality Experiences                              | -0.0398***<br>(0.0141) | -0.0215*<br>(0.0126)    | -0.0125<br>(0.0112)   | -0.0451***<br>(0.0124)  | -0.0469***<br>(0.0123)  | -0.0411***<br>(0.0129)  |
| Observations  | 23,238                 | 26,325                  | 29,233                | 40,302                  | 46,587                  | 33,097                  |
| <b>Panel C: Top 10 percent</b>                      |                        |                         |                       |                         |                         |                         |
| Inequality Experiences                              | -0.0361**<br>(0.0158)  | -0.0258**<br>(0.0129)   | -0.0163<br>(0.0113)   | -0.0347***<br>(0.0127)  | -0.0515***<br>(0.0128)  | -0.0426***<br>(0.0131)  |
| Observations  | 23,199                 | 26,135                  | 29,083                | 40,136                  | 46,327                  | 32,907                  |
| <b>Panel D: No missings</b>                         |                        |                         |                       |                         |                         |                         |
| Inequality Experiences                              | -0.0458***<br>(0.0155) | -0.0373***<br>(0.0126)  | -0.0221*<br>(0.0128)  | -0.0467***<br>(0.0139)  | -0.0510***<br>(0.0124)  | -0.0437***<br>(0.0141)  |
| Observations  | 20,935                 | 23,817                  | 26,311                | 36,458                  | 40,736                  | 29,298                  |
| <b>Panel E: No unemployment experience controls</b> |                        |                         |                       |                         |                         |                         |
| Inequality Experiences                              | -0.0337**<br>(0.0143)  | -0.0233**<br>(0.0105)   | -0.0129<br>(0.00891)  | -0.0310**<br>(0.0122)   | -0.0485***<br>(0.0107)  | -0.0383***<br>(0.0121)  |
| Observations  | 23,199                 | 26,135                  | 29,083                | 40,136                  | 46,327                  | 32,907                  |
| <b>Panel F: Age trend</b>                           |                        |                         |                       |                         |                         |                         |
| Inequality Experiences                              | -0.0441***<br>(0.0142) | -0.0284**<br>(0.0131)   | -0.0183*<br>(0.0102)  | -0.0303***<br>(0.0114)  | -0.0547***<br>(0.0117)  | -0.0428***<br>(0.0113)  |
| Observations  | 23,199                 | 26,135                  | 29,083                | 40,136                  | 46,327                  | 32,907                  |
| <b>Panel G: Gini coefficient</b>                    |                        |                         |                       |                         |                         |                         |
| Inequality Experiences                              | -0.0494***<br>(0.0122) | -0.0157<br>(0.0127)     | -0.00360<br>(0.00907) | -0.0750***<br>(0.0113)  | -0.0481***<br>(0.00914) | -0.0517***<br>(0.0130)  |
| Observations  | 19,626                 | 20,246                  | 23,272                | 33,004                  | 37,253                  | 25,906                  |
| <b>Panel H: No cohort group FE</b>                  |                        |                         |                       |                         |                         |                         |
| Inequality Experiences                              | -0.0254**<br>(0.0113)  | -0.0298***<br>(0.00863) | -0.0133<br>(0.00825)  | -0.0294***<br>(0.00902) | -0.0211**<br>(0.0107)   | -0.0240***<br>(0.00833) |
| Observations  | 23,199                 | 26,135                  | 29,083                | 40,136                  | 46,327                  | 32,907                  |
| Age FE  | Yes                    | Yes                     | Yes                   | Yes                     | Yes                     | Yes                     |
| Year FE   | Yes                    | Yes                     | Yes                   | Yes                     | Yes                     | Yes                     |
| Cohort group FE                                     | Yes                    | Yes                     | Yes                   | Yes                     | Yes                     | Yes                     |
| Census div FE                                       | Yes                    | Yes                     | Yes                   | Yes                     | Yes                     | Yes                     |
| Unemployment Experiences                            | Yes                    | Yes                     | Yes                   | Yes                     | Yes                     | Yes                     |
| Demographic controls                                | Yes                    | Yes                     | Yes                   | Yes                     | Yes                     | Yes                     |

Standard errors are two-way clustered by age and cohort. Inequality experiences are based on the national level experienced share of total income earned by the top 5 percent during the impressionable years, unless otherwise stated. Unemployment experiences are based on the experienced unemployment rate during the impressionable years. All specifications control for age fixed effects, year fixed effects, cohort group fixed effects as well as region fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. In Panel A, we show the main results. In Panel B, we show the results using the top 1 percent income share as our measure of inequality. In Panel C, we show the results using the top 10 percent income share as our measure of inequality. In Panel D, we only use observations for which we do not have missings in any of the controls. In Panel E, we do not make use of unemployment experience controls. In Panel F, we use an age trend rather than age fixed effects. In Panel G, we show the results using the Gini coefficient as our measure of income inequality. In Panel H, we do not make use of cohort group fixed effects. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A.11: GSS: Robustness (Regional Inequality Experiences)

|   | (1)                    | (2)                    | (3)                   | (4)                     | (5)                    | (6)                    |
|---|------------------------|------------------------|-----------------------|-------------------------|------------------------|------------------------|
|   | Help poor              | Pro welfare            | Success due to luck   | Liberal                 | Party: Democrat        | Voted: Democrat        |
| <b>Panel A: Main</b>                                |                        |                        |                       |                         |                        |                        |
| Inequality Experiences                              | -0.0415**<br>(0.0179)  | -0.0268*<br>(0.0138)   | -0.0142<br>(0.0111)   | -0.0598***<br>(0.0134)  | -0.0522***<br>(0.0123) | -0.0377***<br>(0.0141) |
| Observations  | 22,987                 | 25,831                 | 28,670                | 39,632                  | 45,703                 | 32,597                 |
| <b>Panel B: Top 1 percent</b>                       |                        |                        |                       |                         |                        |                        |
| Inequality Experiences                              | -0.0398***<br>(0.0141) | -0.0215*<br>(0.0126)   | -0.0125<br>(0.0112)   | -0.0451***<br>(0.0124)  | -0.0469***<br>(0.0123) | -0.0411***<br>(0.0129) |
| Observations  | 22,987                 | 25,831                 | 28,670                | 39,632                  | 45,703                 | 32,597                 |
| <b>Panel C: Top 10 percent</b>                      |                        |                        |                       |                         |                        |                        |
| Inequality Experiences                              | -0.0419**<br>(0.0179)  | -0.0241*<br>(0.0143)   | -0.0168<br>(0.0119)   | -0.0564***<br>(0.0137)  | -0.0498***<br>(0.0125) | -0.0351**<br>(0.0144)  |
| Observations  | 22,987                 | 25,831                 | 28,670                | 39,632                  | 45,703                 | 32,597                 |
| <b>Panel D: No missings</b>                         |                        |                        |                       |                         |                        |                        |
| Inequality Experiences                              | -0.0523***<br>(0.0185) | -0.0455***<br>(0.0146) | -0.0180<br>(0.0130)   | -0.0687***<br>(0.0147)  | -0.0591***<br>(0.0123) | -0.0417***<br>(0.0154) |
| Observations  | 20,748                 | 23,545                 | 25,957                | 36,017                  | 40,234                 | 29,033                 |
| <b>Panel E: No unemployment experience controls</b> |                        |                        |                       |                         |                        |                        |
| Inequality Experiences                              | -0.0370**<br>(0.0176)  | -0.0276**<br>(0.0123)  | -0.0129<br>(0.00923)  | -0.0526***<br>(0.0135)  | -0.0529***<br>(0.0109) | -0.0358***<br>(0.0138) |
| Observations  | 22,987                 | 25,831                 | 28,670                | 39,632                  | 45,703                 | 32,597                 |
| <b>Panel F: Age trend</b>                           |                        |                        |                       |                         |                        |                        |
| Inequality Experiences                              | -0.0479***<br>(0.0176) | -0.0272*<br>(0.0140)   | -0.0174*<br>(0.00966) | -0.0494***<br>(0.0125)  | -0.0575***<br>(0.0111) | -0.0355***<br>(0.0130) |
| Observations  | 22,987                 | 25,831                 | 28,670                | 39,632                  | 45,703                 | 32,597                 |
| <b>Panel G: No movers</b>                           |                        |                        |                       |                         |                        |                        |
| Inequality Experiences                              | -0.0409**<br>(0.0203)  | -0.0239*<br>(0.0128)   | -0.0135<br>(0.0141)   | -0.0499***<br>(0.0153)  | -0.0584***<br>(0.0128) | -0.0376***<br>(0.0146) |
| Observations  | 17,653                 | 19,914                 | 22,108                | 30,481                  | 35,252                 | 24,833                 |
| <b>Panel H: No cohort group FE</b>                  |                        |                        |                       |                         |                        |                        |
| Inequality Experiences                              | -0.0274**<br>(0.0109)  | -0.0310***<br>(0.0100) | -0.0122*<br>(0.00731) | -0.0355***<br>(0.00943) | -0.0184*<br>(0.00981)  | -0.0168**<br>(0.00733) |
| Observations  | 22,987                 | 25,831                 | 28,670                | 39,632                  | 45,703                 | 32,597                 |
| Census div 16 FE x Age FE                           | Yes                    | Yes                    | Yes                   | Yes                     | Yes                    | Yes                    |
| Census div 16 FE x Year FE                          | Yes                    | Yes                    | Yes                   | Yes                     | Yes                    | Yes                    |
| Census div 16 FE x Cohort group FE                  | Yes                    | Yes                    | Yes                   | Yes                     | Yes                    | Yes                    |
| Census div FE                                       | Yes                    | Yes                    | Yes                   | Yes                     | Yes                    | Yes                    |
| Unemployment Experiences                            | Yes                    | Yes                    | Yes                   | Yes                     | Yes                    | Yes                    |
| Demographic controls                                | Yes                    | Yes                    | Yes                   | Yes                     | Yes                    | Yes                    |

Standard errors are two-way clustered by age and cohort. Inequality experiences are based on the national level experienced share of total income earned by the top 5 percent during the impressionable years, unless otherwise stated. Unemployment experiences are based on the experienced unemployment rate during the impressionable years. All specifications control for age fixed effects, year fixed effects and cohort group fixed effects, each interacted with census division at 16 fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. In Panel A, we show the main results. In Panel B, we show the results using the top 1 percent income share as our measure of inequality. In Panel C, we show the results using the top 10 percent income share as our measure of inequality. In Panel D, we only use observations for which we do not have missings in any of the controls. In Panel E, we do not make use of unemployment experience controls. In Panel F, we use an age trend rather than age fixed effects. In Panel G, we show the results excluding those who moved to a different census division between age 16 and the time of the interview. In Panel H, we do not make use of cohort group fixed effects.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A.12: Allbus: Robustness

|   | (1)                    | (2)  | (3)                         | (4)                     | (5)                        | (6)                    |
|---|------------------------|--|-----------------------------|-------------------------|----------------------------|------------------------|
|   | Inequality:<br>Unfair  | Inequality does not<br>increase motivation | Inequality<br>reflects luck | Left-wing               | Intention to Vote:<br>Left | Voted: Left            |
| <b>Panel A: Main</b>                                    |                        |  |                             |                         |                            |                        |
| Inequality Experiences                                  | -0.0544*<br>(0.0307)   | -0.0428<br>(0.0296)                        | -0.0684**<br>(0.0349)       | -0.0956***<br>(0.0196)  | -0.0837***<br>(0.0298)     | -0.0962**<br>(0.0456)  |
| Observations  | 10,401                 | 10,357                                     | 10,309                      | 18,979                  | 14,691                     | 9,533                  |
| <b>Panel B: Top 1 percent</b>                           |                        |  |                             |                         |                            |                        |
| Inequality Experiences                                  | -0.109***<br>(0.0333)  | -0.0650*<br>(0.0352)                       | -0.123***<br>(0.0286)       | -0.125***<br>(0.0229)   | -0.138***<br>(0.0287)      | -0.141***<br>(0.0430)  |
| Observations  | 13,635                 | 13,537                                     | 13,478                      | 25,555                  | 20,236                     | 12,930                 |
| <b>Panel C: Top 10 percent</b>                          |                        |  |                             |                         |                            |                        |
| Inequality Experiences                                  | -0.0678<br>(0.0466)    | -0.0697<br>(0.0436)                        | -0.0579<br>(0.0525)         | -0.127***<br>(0.0312)   | -0.0742*<br>(0.0394)       | -0.0824<br>(0.0729)    |
| Observations  | 10,401                 | 10,357                                     | 10,309                      | 18,979                  | 14,691                     | 9,533                  |
| <b>Panel D: No missings</b>                             |                        |  |                             |                         |                            |                        |
| Inequality Experiences                                  | -0.0382<br>(0.0365)    | -0.0610*<br>(0.0339)                       | -0.0626<br>(0.0411)         | -0.102***<br>(0.0254)   | -0.0987***<br>(0.0352)     | -0.0833<br>(0.0562)    |
| Observations  | 7,719                  | 7,686                                      | 7,669                       | 13,609                  | 10,997                     | 6,831                  |
| <b>Panel E: No unemployment<br/>experience controls</b> |                        |  |                             |                         |                            |                        |
| Inequality Experiences                                  | -0.0896***<br>(0.0212) | -0.0523**<br>(0.0242)                      | -0.101***<br>(0.0271)       | -0.0983***<br>(0.0219)  | -0.0904***<br>(0.0266)     | -0.124***<br>(0.0430)  |
| Observations  | 10,401                 | 10,357                                     | 10,309                      | 18,979                  | 14,691                     | 9,533                  |
| <b>Panel F: Age trend</b>                               |                        |  |                             |                         |                            |                        |
| Inequality Experiences                                  | -0.0548**<br>(0.0236)  | -0.0498**<br>(0.0213)                      | -0.0864***<br>(0.0239)      | -0.0982***<br>(0.0186)  | -0.105***<br>(0.0295)      | -0.0987**<br>(0.0478)  |
| Observations  | 10,401                 | 10,357                                     | 10,309                      | 18,979                  | 14,691                     | 9,533                  |
| <b>Panel G: Gini coefficient</b>                        |                        |  |                             |                         |                            |                        |
| Inequality Experiences                                  | -0.0188<br>(0.0216)    | -0.0616***<br>(0.0172)                     | -0.0458**<br>(0.0226)       | -0.0530***<br>(0.00863) | -0.0695***<br>(0.0123)     | -0.0539**<br>(0.0221)  |
| Observations  | 9,783                  | 9,766                                      | 9,716                       | 17,318                  | 13,242                     | 8,827                  |
| <b>Panel H: No cohort group FE</b>                      |                        |  |                             |                         |                            |                        |
| Inequality Experiences                                  | -0.0347*<br>(0.0200)   | -0.0398**<br>(0.0202)                      | -0.0512**<br>(0.0239)       | -0.0492***<br>(0.0132)  | -0.0674***<br>(0.0178)     | -0.0979***<br>(0.0294) |
| Observations  | 10,401                 | 10,357                                     | 10,309                      | 18,979                  | 14,691                     | 9,533                  |
| Age FE  | Yes                    | Yes  | Yes                         | Yes                     | Yes                        | Yes                    |
| Year FE   | Yes                    | Yes  | Yes                         | Yes                     | Yes                        | Yes                    |
| Cohort group FE   | Yes                    | Yes  | Yes                         | Yes                     | Yes                        | Yes                    |
| Region FE   | Yes                    | Yes  | Yes                         | Yes                     | Yes                        | Yes                    |
| Unemployment Experiences                                | Yes                    | Yes  | Yes                         | Yes                     | Yes                        | Yes                    |
| Demographic controls                                    | Yes                    | Yes  | Yes                         | Yes                     | Yes                        | Yes                    |

Standard errors are two-way clustered by age and cohort. Inequality experiences are based on the national level experienced share of total income earned by the top 5 percent during the impressionable years, unless otherwise stated. Unemployment experiences are based on the experienced unemployment rate during the impressionable years. All specifications control for age fixed effects, year fixed effects, cohort group fixed effects as well as region fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. In Panel A, we show the main results. In Panel B, we show the results using the top 1 percent income share as our measure of inequality. In Panel C, we show the results using the top 10 percent income share as our measure of inequality. In Panel D, we only use observations for which we do not have missings in any of the controls. In Panel E, we do not make use of unemployment experience controls. In Panel F, we use an age trend rather than age fixed effects. In Panel G, we show the results using the Gini coefficient as our measure of income inequality. In Panel H, we do not make use of cohort group fixed effects. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A.13: ESS: Robustness

|   | (1)                    | (2)                    | (3)                   |
|---|------------------------|------------------------|-----------------------|
|   | Pro-redistribution     | Left-wing              | Voted: Left           |
| <b>Panel A: Main</b>                                |                        |                        |                       |
| Inequality Experiences                              | -0.0390*<br>(0.0234)   | -0.117***<br>(0.0200)  | -0.121***<br>(0.0389) |
| Observations  | 85,529                 | 81,167                 | 25,462                |
| <b>Panel B: Top 1 percent</b>                       |                        |                        |                       |
| Inequality Experiences                              | -0.0509*<br>(0.0279)   | -0.124***<br>(0.0193)  | -0.127***<br>(0.0371) |
| Observations  | 92,831                 | 87,731                 | 28,591                |
| <b>Panel C: Top 10 percent</b>                      |                        |                        |                       |
| Inequality Experiences                              | -0.0412*<br>(0.0223)   | -0.108***<br>(0.0203)  | -0.114***<br>(0.0404) |
| Observations  | 84,485                 | 79,676                 | 25,438                |
| <b>Panel D: No missings</b>                         |                        |                        |                       |
| Inequality Experiences                              | -0.0486**<br>(0.0244)  | -0.124***<br>(0.0251)  | -0.118***<br>(0.0453) |
| Observations  | 68,937                 | 66,498                 | 21,899                |
| <b>Panel E: No unemployment experience controls</b> |                        |                        |                       |
| Inequality Experiences                              | -0.0435*<br>(0.0241)   | -0.118***<br>(0.0193)  | -0.118***<br>(0.0367) |
| Observations  | 85,529                 | 81,167                 | 25,462                |
| <b>Panel F: Gini coefficient</b>                    |                        |                        |                       |
| Inequality Experiences                              | -0.0850**<br>(0.0344)  | -0.155**<br>(0.0613)   | -0.183**<br>(0.0795)  |
| Observations  | 44,670                 | 42,077                 | 15,852                |
| <b>Panel G: No cohort group FE</b>                  |                        |                        |                       |
| Inequality Experiences                              | -0.0491***<br>(0.0144) | -0.106***<br>(0.00980) | -0.139***<br>(0.0245) |
| Observations  | 85,529                 | 81,167                 | 25,462                |
| Country FE x Age trend                              | Yes                    | Yes                    | Yes                   |
| Country FE x Year FE                                | Yes                    | Yes                    | Yes                   |
| Country FE x Cohort group FE                        | Yes                    | Yes                    | Yes                   |
| Unemployment Experiences                            | Yes                    | Yes                    | Yes                   |
| Demographic controls                                | Yes                    | Yes                    | Yes                   |

Standard errors are two-way clustered by age and cohort. Inequality experiences are based on the experienced share of total income earned by the top 5 percent during the impressionable years unless otherwise stated. Unemployment experiences are based on the experienced national unemployment rate during the impressionable years. All specifications control for age trends, year fixed effects as well as cohort group fixed effects, each interacted with country fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. In Panel A, we show the main results. In Panel B, we show the results using the top 1 percent income share as our measure of inequality. In Panel C, we show the results using the top 10 percent income share as our measure of inequality. In Panel D, we only use observations for which we do not have missings in any of the controls. In Panel E, we do not make use of unemployment experience controls. In Panel F, we show the results using the Gini coefficient as our measure of income inequality. In Panel G, we do not include cohort group fixed effects. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .



Table A.14: GSS: Summary Stats

| Variable                                  | Mean   | Std. Dev. | Min.   | Max.   | N     |
|---|--------|-----------|--------|--------|-------|
| Vote: Democrat                            | 0.466  | 0.499     | 0      | 1      | 32907 |
| Share top 10 during impr years (national) | 34.879 | 4.16      | 31.779 | 46.294 | 47207 |
| Share top 5 during impr years (national)  | 23.587 | 3.785     | 20.679 | 33.926 | 47207 |
| Share top 1 during impr years (national)  | 10.375 | 2.882     | 7.875  | 17.805 | 47207 |
| Gini during impr year (national)          | 38.566 | 2.035     | 36.838 | 45.225 | 36080 |
| Unemployment during impr years            | 6.545  | 2.913     | 3.875  | 17.988 | 47207 |
| Share top 10 during impr years (regional) | 35.411 | 3.898     | 28.246 | 50.609 | 46544 |
| Share top 5 during impr years (regional)  | 24.458 | 3.514     | 18.935 | 39.275 | 46544 |
| Share top 1 during impr years (regional)  | 11.429 | 2.705     | 7.565  | 23.098 | 46544 |
| Full-time employed                        | 0.517  | 0.5       | 0      | 1      | 47207 |
| Part-time employed                        | 0.096  | 0.294     | 0      | 1      | 47207 |
| Temporarily not working                   | 0.024  | 0.152     | 0      | 1      | 47207 |
| Unemployed                                | 0.03   | 0.17      | 0      | 1      | 47207 |
| Retired                                   | 0.135  | 0.342     | 0      | 1      | 47207 |
| In School                                 | 0.011  | 0.103     | 0      | 1      | 47207 |
| Keeping house                             | 0.168  | 0.374     | 0      | 1      | 47207 |
| Other labor force                         | 0.021  | 0.142     | 0      | 1      | 47207 |
| Married                                   | 0.675  | 0.468     | 0      | 1      | 47207 |
| Widowed                                   | 0.072  | 0.258     | 0      | 1      | 47207 |
| Divorced                                  | 0.107  | 0.31      | 0      | 1      | 47207 |
| Separated                                 | 0.028  | 0.164     | 0      | 1      | 47207 |
| Single                                    | 0.118  | 0.323     | 0      | 1      | 47207 |
| Age                                       | 48.249 | 14.975    | 26     | 88     | 47207 |
| Less than high school                     | 0.207  | 0.405     | 0      | 1      | 47207 |
| High school                               | 0.570  | 0.495     | 0      | 1      | 47207 |
| College                                   | 0.221  | 0.415     | 0      | 1      | 47207 |
| Female                                    | 0.547  | 0.498     | 0      | 1      | 47207 |
| White                                     | 0.839  | 0.367     | 0      | 1      | 47207 |
| Black                                     | 0.133  | 0.339     | 0      | 1      | 47207 |
| Other race                                | 0.028  | 0.165     | 0      | 1      | 47207 |
| Born in US                                | 0.84   | 0.367     | 0      | 1      | 47207 |
| Household Size                            | 2.853  | 1.28      | 1      | 5      | 47203 |
| Urban                                     | 0.466  | 0.499     | 0      | 1      | 47207 |
| Protestant                                | 0.614  | 0.487     | 0      | 1      | 47207 |
| Catholic                                  | 0.234  | 0.423     | 0      | 1      | 47207 |
| Jewish                                    | 0.019  | 0.137     | 0      | 1      | 47207 |
| No religion                               | 0.097  | 0.297     | 0      | 1      | 47207 |
| Other religion                            | 0.032  | 0.175     | 0      | 1      | 47207 |

Table A.15: Allbus: Summary Stats

| Variable                       | Mean   | Std. Dev. | Min.   | Max.   | N     |
|--------------------------------|--------|-----------|--------|--------|-------|
| Share top 10 during impr years | 31.814 | 1.253     | 30.997 | 39.479 | 20712 |
| Share top 5 during impr years  | 22.068 | 0.965     | 21.171 | 31.464 | 20712 |
| Share top 1 during impr years  | 10.54  | 0.864     | 9.631  | 19.825 | 20712 |
| Gini during impr years         | 25.27  | 0.812     | 24.576 | 28.075 | 18626 |
| Unemployment during impr years | 5.699  | 4.186     | 1.188  | 22.212 | 20712 |
| Age                            | 42.72  | 12.798    | 26     | 102    | 20712 |
| Female                         | 0.517  | 0.5       | 0      | 1      | 20712 |
| Education: No schooling        | 0.012  | 0.107     | 0      | 1      | 20712 |
| Education: "Hauptschule"       | 0.422  | 0.494     | 0      | 1      | 20712 |
| Education: Middle school       | 0.284  | 0.451     | 0      | 1      | 20712 |
| Education: A-levels            | 0.277  | 0.448     | 0      | 1      | 20712 |
| Married                        | 0.686  | 0.464     | 0      | 1      | 20712 |
| Separated                      | 0.016  | 0.126     | 0      | 1      | 20712 |
| Widowed                        | 0.04   | 0.195     | 0      | 1      | 20712 |
| Divorced                       | 0.071  | 0.256     | 0      | 1      | 20712 |
| Single                         | 0.186  | 0.389     | 0      | 1      | 20712 |
| Full-time employed             | 0.544  | 0.498     | 0      | 1      | 20712 |
| Part-time employed             | 0.118  | 0.322     | 0      | 1      | 20712 |
| Out of labor force             | 0.314  | 0.464     | 0      | 1      | 20712 |
| Unemployed                     | 0.007  | 0.081     | 0      | 1      | 20712 |
| Retired                        | 0.014  | 0.117     | 0      | 1      | 20712 |
| Student                        | 0.002  | 0.049     | 0      | 1      | 20712 |
| Other employment               | 0      | 0.02      | 0      | 1      | 20712 |
| Protestant                     | 0.412  | 0.492     | 0      | 1      | 20712 |
| Catholic                       | 0.412  | 0.492     | 0      | 1      | 20712 |
| Other religion                 | 0.015  | 0.123     | 0      | 1      | 20712 |
| No Religion                    | 0.157  | 0.363     | 0      | 1      | 20712 |
| Household Size                 | 2.851  | 1.228     | 1      | 5      | 20665 |

Table A.16: ESS: Summary Stats

| Variable                       | Mean   | Std. Dev. | Min.   | Max.   | N     |
|--------------------------------|--------|-----------|--------|--------|-------|
| Share top 10 during impr years | 31.468 | 3.126     | 21.839 | 43.379 | 79640 |
| Share top 5 during impr years  | 20.898 | 2.622     | 13.343 | 32.606 | 86303 |
| Share top 1 during impr years  | 8.48   | 1.918     | 4.024  | 17.25  | 86303 |
| Gini during impr years         | 28.411 | 3.717     | 20.569 | 37.15  | 43918 |
| Unemployment during impr years | 6.854  | 4.284     | 0.01   | 35.287 | 86303 |
| Male                           | 0.479  | 0.5       | 0      | 1      | 86303 |
| Age                            | 47.236 | 12.989    | 26     | 102    | 86303 |
| Below high school              | 0.264  | 0.441     | 0      | 1      | 86303 |
| High school                    | 0.451  | 0.498     | 0      | 1      | 86303 |
| College                        | 0.278  | 0.448     | 0      | 1      | 86303 |
| Married                        | 0.601  | 0.49      | 0      | 1      | 86303 |
| Separated                      | 0.014  | 0.116     | 0      | 1      | 86303 |
| Divorced                       | 0.088  | 0.283     | 0      | 1      | 86303 |
| Widowed                        | 0.036  | 0.185     | 0      | 1      | 86303 |
| Never married                  | 0.207  | 0.405     | 0      | 1      | 86303 |
| Employed                       | 0.789  | 0.408     | 0      | 1      | 86303 |
| Self-employed                  | 0.13   | 0.336     | 0      | 1      | 86303 |
| Not in paid work               | 0.055  | 0.229     | 0      | 1      | 86303 |
| Religion: Catholic             | 0.265  | 0.441     | 0      | 1      | 86303 |
| Religion: Protestant           | 0.197  | 0.398     | 0      | 1      | 86303 |
| Religion: Eastern Orthodox     | 0.001  | 0.023     | 0      | 1      | 86303 |
| Religion: other christian      | 0.013  | 0.114     | 0      | 1      | 86303 |
| Religion: Jewish               | 0.001  | 0.034     | 0      | 1      | 86303 |
| Religion: Islamic              | 0.006  | 0.078     | 0      | 1      | 86303 |
| Religion: Other                | 0.005  | 0.074     | 0      | 1      | 86303 |
| Religion: None                 | 0.403  | 0.49      | 0      | 1      | 86303 |
| Household Size                 | 2.778  | 1.218     | 1      | 5      | 86270 |
| Income bracket (waves 1-3)     | 7.29   | 2.169     | 1      | 12     | 31690 |
| Income bracket (waves 4-7)     | 5.905  | 2.748     | 1      | 10     | 43220 |
| Denmark                        | 0.021  | 0.145     | 0      | 1      | 86303 |
| Finland                        | 0.019  | 0.137     | 0      | 1      | 86303 |
| France                         | 0.189  | 0.391     | 0      | 1      | 86303 |
| Germany                        | 0.238  | 0.426     | 0      | 1      | 86303 |
| Great Britain                  | 0.21   | 0.408     | 0      | 1      | 86303 |
| Italy                          | 0.044  | 0.205     | 0      | 1      | 86303 |
| Netherlands                    | 0.078  | 0.268     | 0      | 1      | 86303 |
| Norway                         | 0.02   | 0.14      | 0      | 1      | 86303 |
| Portugal                       | 0.019  | 0.138     | 0      | 1      | 86303 |
| Spain                          | 0.09   | 0.286     | 0      | 1      | 86303 |
| Sweden                         | 0.041  | 0.199     | 0      | 1      | 86303 |
| Switzerland                    | 0.03   | 0.171     | 0      | 1      | 86303 |

Table A.17: GSS (national inequality experiences): Main Results showing Key Controls

|                          | (1)                    | (2)                    | (3)                    | (4)                    | (5)                    | (6)                    |
|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
|                          | Help poor              | Pro welfare            | Success due to luck    | Liberal                | Party: Democrat        | Voted: Democrat        |
| Inequality Experiences   | -0.0370**<br>(0.0147)  | -0.0234*<br>(0.0126)   | -0.0147<br>(0.0112)    | -0.0383***<br>(0.0123) | -0.0476***<br>(0.0126) | -0.0414***<br>(0.0129) |
| Unemployment Experiences | 0.00868<br>(0.0158)    | 0.000302<br>(0.00841)  | 0.00397<br>(0.00823)   | 0.0177**<br>(0.00823)  | -0.00213<br>(0.00757)  | 0.00609<br>(0.00627)   |
| Female                   | 0.137***<br>(0.0171)   | 0.0130<br>(0.0165)     | -0.101***<br>(0.0156)  | 0.125***<br>(0.0124)   | 0.126***<br>(0.0141)   | 0.117***<br>(0.0146)   |
| Part-time employed       | 0.0176<br>(0.0259)     | 0.0452<br>(0.0278)     | 0.0540**<br>(0.0233)   | 0.0204<br>(0.0132)     | -0.0384**<br>(0.0159)  | 0.00530<br>(0.0184)    |
| Temporarily not working  | 0.0397<br>(0.0416)     | 0.0739<br>(0.0486)     | -0.0147<br>(0.0442)    | 0.109***<br>(0.0384)   | 0.0420<br>(0.0308)     | 0.0478<br>(0.0359)     |
| Unemployed               | 0.157***<br>(0.0377)   | 0.226***<br>(0.0458)   | 0.110**<br>(0.0480)    | 0.0481*<br>(0.0267)    | 0.0806***<br>(0.0305)  | 0.0913***<br>(0.0296)  |
| Retired                  | 0.0986***<br>(0.0373)  | 0.120***<br>(0.0192)   | -0.000732<br>(0.0282)  | 0.0152<br>(0.0231)     | 0.0677***<br>(0.0182)  | 0.0836***<br>(0.0255)  |
| In school                | 0.0151<br>(0.0570)     | 0.300***<br>(0.0506)   | 0.142***<br>(0.0512)   | 0.0821<br>(0.0569)     | 0.0827<br>(0.0504)     | 0.0421<br>(0.0640)     |
| Keeping the house        | 0.0631***<br>(0.0215)  | 0.148***<br>(0.0179)   | -0.0248<br>(0.0201)    | -0.0797***<br>(0.0203) | -0.0509***<br>(0.0157) | -0.0259<br>(0.0216)    |
| Other labor force        | 0.250***<br>(0.0534)   | 0.326***<br>(0.0503)   | -0.0295<br>(0.0497)    | 0.0619*<br>(0.0372)    | 0.0385<br>(0.0379)     | 0.0635*<br>(0.0351)    |
| Married                  | -0.121***<br>(0.0207)  | -0.151***<br>(0.0287)  | -0.0789***<br>(0.0227) | -0.186***<br>(0.0212)  | -0.115***<br>(0.0149)  | -0.134***<br>(0.0216)  |
| Widowed                  | -0.0928**<br>(0.0414)  | -0.0928***<br>(0.0339) | -0.0883***<br>(0.0310) | -0.0997***<br>(0.0280) | -0.0287<br>(0.0182)    | -0.0933***<br>(0.0301) |
| Divorced                 | -0.0329<br>(0.0216)    | -0.0285<br>(0.0269)    | -0.00705<br>(0.0306)   | -0.0210<br>(0.0245)    | -0.0331*<br>(0.0194)   | -0.0613**<br>(0.0247)  |
| Separated                | 0.00189<br>(0.0447)    | -0.0145<br>(0.0489)    | -0.0570<br>(0.0383)    | -0.00536<br>(0.0329)   | -0.0853***<br>(0.0276) | -0.0858***<br>(0.0308) |
| High-school              | -0.244***<br>(0.0232)  | -0.123***<br>(0.0162)  | 0.0624***<br>(0.0196)  | -0.0958***<br>(0.0147) | -0.176***<br>(0.0198)  | -0.190***<br>(0.0206)  |
| College                  | -0.319***<br>(0.0260)  | 0.0310<br>(0.0223)     | 0.100***<br>(0.0261)   | -0.0137<br>(0.0176)    | -0.246***<br>(0.0269)  | -0.137***<br>(0.0237)  |
| Black                    | 0.526***<br>(0.0199)   | 0.604***<br>(0.0282)   | 0.180***<br>(0.0202)   | 0.317***<br>(0.0195)   | 0.888***<br>(0.0179)   | 1.027***<br>(0.0143)   |
| Other race               | 0.160***<br>(0.0349)   | 0.234***<br>(0.0546)   | 0.0784*<br>(0.0459)    | 0.157***<br>(0.0395)   | 0.339***<br>(0.0307)   | 0.441***<br>(0.0519)   |
| Income bracket 2         | 0.103<br>(0.0979)      | 0.0769<br>(0.0756)     | -0.0732<br>(0.0869)    | -0.116<br>(0.0851)     | 0.0377<br>(0.0484)     | 0.0604<br>(0.0752)     |
| Income bracket 3         | 0.0830<br>(0.112)      | 0.0170<br>(0.0694)     | -0.00125<br>(0.0867)   | -0.0922<br>(0.0979)    | 0.105**<br>(0.0535)    | 0.171**<br>(0.0853)    |
| Income bracket 4         | 0.131<br>(0.105)       | -0.107<br>(0.0820)     | -0.107<br>(0.0796)     | -0.0490<br>(0.0955)    | 0.159***<br>(0.0498)   | 0.164**<br>(0.0804)    |
| Income bracket 5         | 0.119<br>(0.103)       | -0.109<br>(0.0731)     | -0.0625<br>(0.0704)    | -0.111<br>(0.0944)     | 0.174***<br>(0.0485)   | 0.141*<br>(0.0751)     |
| Income bracket 6         | 0.111<br>(0.116)       | -0.171**<br>(0.0741)   | -0.145**<br>(0.0649)   | -0.0804<br>(0.0841)    | 0.115**<br>(0.0472)    | 0.119<br>(0.0764)      |
| Income bracket 7         | 0.00347<br>(0.101)     | -0.233***<br>(0.0785)  | -0.0755<br>(0.0774)    | -0.0977<br>(0.0896)    | 0.185***<br>(0.0464)   | 0.108<br>(0.0825)      |
| Income bracket 8         | -0.0282<br>(0.102)     | -0.243***<br>(0.0780)  | -0.0536<br>(0.0604)    | -0.0447<br>(0.0833)    | 0.183***<br>(0.0482)   | 0.140*<br>(0.0829)     |
| Income bracket 9         | -0.0445<br>(0.0955)    | -0.345***<br>(0.0742)  | -0.0811<br>(0.0608)    | -0.0533<br>(0.0799)    | 0.181***<br>(0.0440)   | 0.103<br>(0.0735)      |
| Income bracket 10        | -0.0354<br>(0.0851)    | -0.417***<br>(0.0679)  | -0.152**<br>(0.0638)   | -0.0854<br>(0.0780)    | 0.149***<br>(0.0443)   | 0.0780<br>(0.0768)     |
| Income bracket 11        | -0.141*<br>(0.0842)    | -0.409***<br>(0.0646)  | -0.137*<br>(0.0727)    | -0.115<br>(0.0802)     | 0.112**<br>(0.0470)    | 0.0423<br>(0.0724)     |
| Income bracket 12        | -0.234***<br>(0.0878)  | -0.498***<br>(0.0684)  | -0.138**<br>(0.0625)   | -0.134*<br>(0.0781)    | 0.0209<br>(0.0415)     | -0.0655<br>(0.0702)    |
| Protestant               | -0.160***<br>(0.0188)  | -0.144***<br>(0.0231)  | -0.158***<br>(0.0244)  | -0.535***<br>(0.0235)  | -0.348***<br>(0.0188)  | -0.535***<br>(0.0241)  |
| Catholic                 | -0.0755***<br>(0.0247) | -0.107***<br>(0.0233)  | -0.114***<br>(0.0260)  | -0.401***<br>(0.0247)  | -0.0534***<br>(0.0191) | -0.317***<br>(0.0232)  |
| Jewish                   | 0.0504<br>(0.0523)     | 0.200***<br>(0.0505)   | 0.0814<br>(0.0555)     | 0.0642<br>(0.0461)     | 0.378***<br>(0.0443)   | 0.196***<br>(0.0486)   |
| Other religion           | -0.0429<br>(0.0355)    | -0.112***<br>(0.0396)  | -0.0184<br>(0.0455)    | -0.327***<br>(0.0486)  | -0.176***<br>(0.0337)  | -0.240***<br>(0.0430)  |
| Cohort: 1876 - 1900      | -0.464<br>(0.303)      | -0.191**<br>(0.0757)   | 0.0247<br>(0.106)      | 0.0176<br>(0.135)      | -0.132<br>(0.136)      | 0.0393<br>(0.0841)     |
| Cohort: 1901 - 1925      | -0.0569<br>(0.0601)    | -0.0102<br>(0.0623)    | 0.0636<br>(0.0523)     | 0.0858<br>(0.0875)     | -0.0332<br>(0.0778)    | -0.00948<br>(0.0726)   |
| Cohort: 1926 - 1950      | -0.0832*<br>(0.0473)   | 0.0153<br>(0.0550)     | 0.0477<br>(0.0417)     | 0.0487<br>(0.0719)     | -0.0792<br>(0.0574)    | -0.0349<br>(0.0563)    |
| Cohort: 1951 - 1975      | -0.0662*<br>(0.0399)   | 0.00629<br>(0.0478)    | 0.00460<br>(0.0333)    | -0.0184<br>(0.0534)    | -0.151***<br>(0.0418)  | -0.106***<br>(0.0408)  |
| Observations             | 23,199                 | 26,135                 | 29,083                 | 40,136                 | 46,327                 | 32,907                 |
| R-squared                | 0.108                  | 0.128                  | 0.024                  | 0.078                  | 0.146                  | 0.200                  |
| Age FE                   | Yes                    | Yes                    | Yes                    | Yes                    | Yes                    | Yes                    |
| Year FE                  | Yes                    | Yes                    | Yes                    | Yes                    | Yes                    | Yes                    |
| Census div FE            | Yes                    | Yes                    | Yes                    | Yes                    | Yes                    | Yes                    |
| Demographic controls     | Yes                    | Yes                    | Yes                    | Yes                    | Yes                    | Yes                    |

Standard errors are two-way clustered by age and cohort. Inequality experiences are based on the experienced share of total income earned by the top 5 percent during the impressionable years. Unemployment experiences are based on the experienced unemployment rate during the impressionable years. All specifications control for age fixed effects, region fixed effects as well as year fixed effects. All specifications include a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A.18: Allbus: Main Results showing Key Controls

|                            | (1)                    | (2)  | (3)                         | (4)                    | (5)                        | (6)                   |
|----------------------------|------------------------|--|-----------------------------|------------------------|----------------------------|-----------------------|
|                            | Inequality:<br>Unfair  | Inequality does not<br>increase motivation | Inequality<br>reflects luck | Left-wing              | Intention to Vote:<br>Left | Voted: Left           |
| Inequality Experiences     | -0.0543*<br>(0.0307)   | -0.0428<br>(0.0296)                        | -0.0684*<br>(0.0349)        | -0.0957***<br>(0.0196) | -0.0836***<br>(0.0298)     | -0.0961**<br>(0.0457) |
| Unemployment Experiences   | 0.104*<br>(0.0586)     | 0.0279<br>(0.0443)                         | 0.0950*<br>(0.0515)         | 0.00877<br>(0.0321)    | 0.0243<br>(0.0477)         | 0.0909<br>(0.0701)    |
| Female                     | 0.0884***<br>(0.0231)  | 0.126***<br>(0.0240)                       | 0.0969***<br>(0.0232)       | 0.0771***<br>(0.0132)  | 0.0547***<br>(0.0200)      | 0.0425<br>(0.0322)    |
| Education: "Hauptschule"   | -0.185**<br>(0.0944)   | -0.0912<br>(0.117)                         | -0.0306<br>(0.101)          | -0.0140<br>(0.0594)    | -0.0189<br>(0.0796)        | 0.0780<br>(0.0689)    |
| Education: "Middle School" | -0.239**<br>(0.0974)   | 0.0269<br>(0.122)                          | 0.122<br>(0.104)            | 0.0226<br>(0.0573)     | -0.0402<br>(0.0755)        | 0.0414<br>(0.0561)    |
| Education: "A-level"       | -0.171*<br>(0.0906)    | 0.196*<br>(0.116)                          | 0.370***<br>(0.0897)        | 0.249***<br>(0.0593)   | 0.119<br>(0.0739)          | 0.244***<br>(0.0653)  |
| Married                    | -0.0541<br>(0.0341)    | -0.0294<br>(0.0284)                        | -0.0389<br>(0.0289)         | -0.137***<br>(0.0248)  | -0.131***<br>(0.0214)      | -0.183***<br>(0.0351) |
| Separated                  | 0.0162<br>(0.0633)     | -0.0822*<br>(0.0495)                       | -0.00468<br>(0.0697)        | -0.119*<br>(0.0640)    | 0.00804<br>(0.0635)        | -0.121<br>(0.0808)    |
| Widowed                    | -0.0283<br>(0.0710)    | 0.0562<br>(0.0573)                         | 0.0585<br>(0.0909)          | -0.163***<br>(0.0436)  | -0.0767**<br>(0.0361)      | -0.127**<br>(0.0552)  |
| Divorced                   | 0.103**<br>(0.0521)    | 0.0298<br>(0.0500)                         | 0.0797**<br>(0.0360)        | -0.0806**<br>(0.0379)  | 0.0261<br>(0.0381)         | -0.0569<br>(0.0387)   |
| Part-time employed         | 0.0453<br>(0.0318)     | 0.00123<br>(0.0454)                        | 0.0389<br>(0.0362)          | 0.0757***<br>(0.0176)  | 0.0958***<br>(0.0289)      | 0.125***<br>(0.0317)  |
| Out of the labor force     | 0.0837***<br>(0.0278)  | 0.0231<br>(0.0285)                         | 0.0536*<br>(0.0277)         | 0.0422*<br>(0.0229)    | 0.0748***<br>(0.0209)      | 0.0804***<br>(0.0224) |
| Unemployed                 | 0.379***<br>(0.0956)   | 0.164<br>(0.114)                           | 0.378***<br>(0.100)         | 0.317***<br>(0.123)    | 0.325***<br>(0.0292)       | 0.336***<br>(0.0995)  |
| Retired                    | 0.0112<br>(0.110)      | 0.0109<br>(0.136)                          | 0.0520<br>(0.167)           | 0.0405<br>(0.0523)     | 0.207***<br>(0.0741)       | 0.162<br>(0.125)      |
| Student                    | 0.445***<br>(0.0871)   | 0.675***<br>(0.105)                        | 0.186<br>(0.163)            | 0.473***<br>(0.147)    | 0.203*<br>(0.119)          | 0.289**<br>(0.117)    |
| Other employment           | 0.573<br>(0.502)       | -0.643<br>(0.426)                          | -0.316<br>(0.576)           | 0.206<br>(0.224)       | 0.485<br>(0.453)           | 0.611***<br>(0.127)   |
| Protestant                 | -0.0492**<br>(0.0250)  | -0.0692**<br>(0.0319)                      | -0.0562*<br>(0.0317)        | -0.177***<br>(0.0196)  | -0.230***<br>(0.0159)      | -0.204***<br>(0.0176) |
| Catholic                   | -0.0793***<br>(0.0242) | -0.0634*<br>(0.0372)                       | -0.0505<br>(0.0351)         | -0.323***<br>(0.0245)  | -0.490***<br>(0.0224)      | -0.506***<br>(0.0322) |
| Other religion             | -0.137*<br>(0.0823)    | 0.0117<br>(0.0926)                         | -0.0476<br>(0.0837)         | -0.112*<br>(0.0585)    | -0.0247<br>(0.0762)        | -0.113<br>(0.107)     |
| Income quintile: 2         | -0.0793**<br>(0.0328)  | 0.0145<br>(0.0501)                         | -0.000689<br>(0.0371)       | -0.0736*<br>(0.0386)   | -0.130***<br>(0.0346)      | -0.130***<br>(0.0484) |
| Income quintile: 3         | -0.108***<br>(0.0364)  | -0.0784*<br>(0.0461)                       | -0.0760**<br>(0.0319)       | -0.0946***<br>(0.0342) | -0.143***<br>(0.0330)      | -0.135***<br>(0.0398) |
| Income quintile: 4         | -0.176***<br>(0.0378)  | -0.0870*<br>(0.0466)                       | -0.0970**<br>(0.0453)       | -0.0985***<br>(0.0339) | -0.150***<br>(0.0345)      | -0.173***<br>(0.0389) |
| Income quintile: 5         | -0.296***<br>(0.0332)  | -0.153***<br>(0.0465)                      | -0.186***<br>(0.0377)       | -0.192***<br>(0.0389)  | -0.298***<br>(0.0307)      | -0.295***<br>(0.0438) |
| Cohort: 1876 - 1900        | 0.692**<br>(0.345)     | -0.165<br>(0.342)                          | 0.441<br>(0.404)            | 0.720***<br>(0.265)    | 0.945**<br>(0.449)         | 0.825**<br>(0.400)    |
| Cohort: 1901 - 1925        |                        |  |                             | 0.130<br>(0.266)       | 0.328<br>(0.422)           |                       |
| Cohort: 1926 - 1950        | -0.117**<br>(0.0546)   | -0.0695<br>(0.0819)                        | -0.101<br>(0.0635)          | -0.106*<br>(0.0637)    | -0.0842<br>(0.0691)        | -0.0754<br>(0.125)    |
| Cohort: 1951 - 1975        | -0.0975*<br>(0.0583)   | -0.0474<br>(0.0739)                        | -0.0866<br>(0.0541)         | -0.123**<br>(0.0574)   | -0.0149<br>(0.0676)        | -0.0318<br>(0.121)    |
| Observations               | 10,401                 | 10,357                                     | 10,309                      | 18,979                 | 14,691                     | 9,533                 |
| R-squared                  | 0.071                  | 0.044                                      | 0.068                       | 0.080                  | 0.109                      | 0.111                 |
| Age FE                     | Yes                    | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |
| Year FE                    | Yes                    | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |
| Region FE                  | Yes                    | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |
| Unemployment Experiences   | Yes                    | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |
| Demographic controls       | Yes                    | Yes  | Yes                         | Yes                    | Yes                        | Yes                   |

Standard errors are two-way clustered by age and cohort. Inequality experiences are based on the experienced share of total income earned by the top 5 percent during the impressionable years. Unemployment experiences are based on the experienced national unemployment rate during the impressionable years. All specifications control for age fixed effects, region fixed effects as well as year fixed effects. All specifications include a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A.19: ESS: Main Results showing Key Controls

|                              | (1)                    | (2)                    | (3)                    |
|------------------------------|------------------------|------------------------|------------------------|
|                              | Pro-redistribution     | Voted: Left            | Left-wing              |
| Inequality Experiences       | -0.0390*<br>(0.0234)   | -0.117***<br>(0.0200)  | -0.121***<br>(0.0389)  |
| Unemployment Experiences     | -0.0328**<br>(0.0163)  | -0.00740<br>(0.0140)   | 0.0164<br>(0.0285)     |
| Male                         | -0.119***<br>(0.00963) | -0.0870***<br>(0.0118) | -0.101***<br>(0.0163)  |
| High school                  | -0.0756***<br>(0.0138) | -0.0298**<br>(0.0121)  | -0.0682**<br>(0.0291)  |
| College                      | -0.204***<br>(0.0114)  | 0.140***<br>(0.0142)   | 0.141***<br>(0.0273)   |
| Married                      | -0.0751***<br>(0.0130) | -0.118***<br>(0.0128)  | -0.0747***<br>(0.0230) |
| Separated                    | -0.0626<br>(0.0405)    | -0.219***<br>(0.0537)  | -0.120*<br>(0.0654)    |
| Divorced                     | -0.0259<br>(0.0178)    | -0.0397*<br>(0.0211)   | -0.0404<br>(0.0385)    |
| Widowed                      | -0.0550**<br>(0.0225)  | -0.0882***<br>(0.0318) | -0.0813*<br>(0.0485)   |
| Self-Employed                | -0.183***<br>(0.0123)  | -0.232***<br>(0.0194)  | -0.228***<br>(0.0170)  |
| Not in paid work             | -0.0387<br>(0.0255)    | -0.0548***<br>(0.0202) | 0.00122<br>(0.0381)    |
| Religion: Catholic           | -0.127***<br>(0.0158)  | -0.353***<br>(0.0179)  | -0.421***<br>(0.0232)  |
| Religion: Protestant         | -0.113***<br>(0.0119)  | -0.269***<br>(0.0146)  | -0.247***<br>(0.0227)  |
| Religion: Eastern Orthodox   | -0.170<br>(0.192)      | 0.117<br>(0.128)       | -0.142<br>(0.272)      |
| Religion: Other Christian    | 0.0235<br>(0.0485)     | -0.226***<br>(0.0384)  | -0.0571<br>(0.0822)    |
| Religion: Jewish             | -0.502***<br>(0.158)   | -0.216*<br>(0.123)     | -0.318*<br>(0.189)     |
| Religion: Islamic            | 0.170***<br>(0.0638)   | 0.158**<br>(0.0789)    | 0.445***<br>(0.0904)   |
| Religion: Other              | 0.0714<br>(0.0630)     | 0.109*<br>(0.0634)     | 0.135<br>(0.0931)      |
| Income bracket: 1            | -0.0118<br>(0.246)     | -0.141<br>(0.193)      | -0.0517<br>(0.246)     |
| Income bracket: 2            | 0.0142<br>(0.227)      | -0.202<br>(0.195)      | -0.128<br>(0.240)      |
| Income bracket: 3            | -0.0558<br>(0.239)     | -0.155<br>(0.192)      | -0.0891<br>(0.223)     |
| Income bracket: 4            | -0.0943<br>(0.240)     | -0.275<br>(0.196)      | -0.200<br>(0.233)      |
| Income bracket: 5            | -0.115<br>(0.241)      | -0.257<br>(0.185)      | -0.170<br>(0.238)      |
| Income bracket: 6            | -0.162<br>(0.233)      | -0.272<br>(0.195)      | -0.190<br>(0.227)      |
| Income bracket: 7            | -0.209<br>(0.231)      | -0.235<br>(0.193)      | -0.185<br>(0.234)      |
| Income bracket: 8            | -0.275<br>(0.240)      | -0.281<br>(0.189)      | -0.243<br>(0.244)      |
| Income bracket: 9            | -0.398*<br>(0.222)     | -0.298<br>(0.187)      | -0.206<br>(0.223)      |
| Income bracket: 10           | -0.669***<br>(0.243)   | -0.443**<br>(0.195)    | -0.415*<br>(0.232)     |
| Observations                 | 85,529                 | 81,167                 | 25,462                 |
| R-squared                    | 0.143                  | 0.079                  | 0.153                  |
| Country FE x Age trends      | Yes                    | Yes                    | Yes                    |
| Country FE x Year FE         | Yes                    | Yes                    | Yes                    |
| Country FE x Cohort group FE | Yes                    | Yes                    | Yes                    |
| Demographic controls         | Yes                    | Yes                    | Yes                    |

Standard errors are two-way clustered by age and cohort. Inequality experiences are based on the experienced share of total income earned by the top 5 percent during the impressionable years. Unemployment experiences are based on the experienced unemployment rate during the impressionable years. All specifications control for age trends, year fixed effects as well as cohort group fixed effects, each interacted with country fixed effects. All specifications include a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

## B Additional Figures

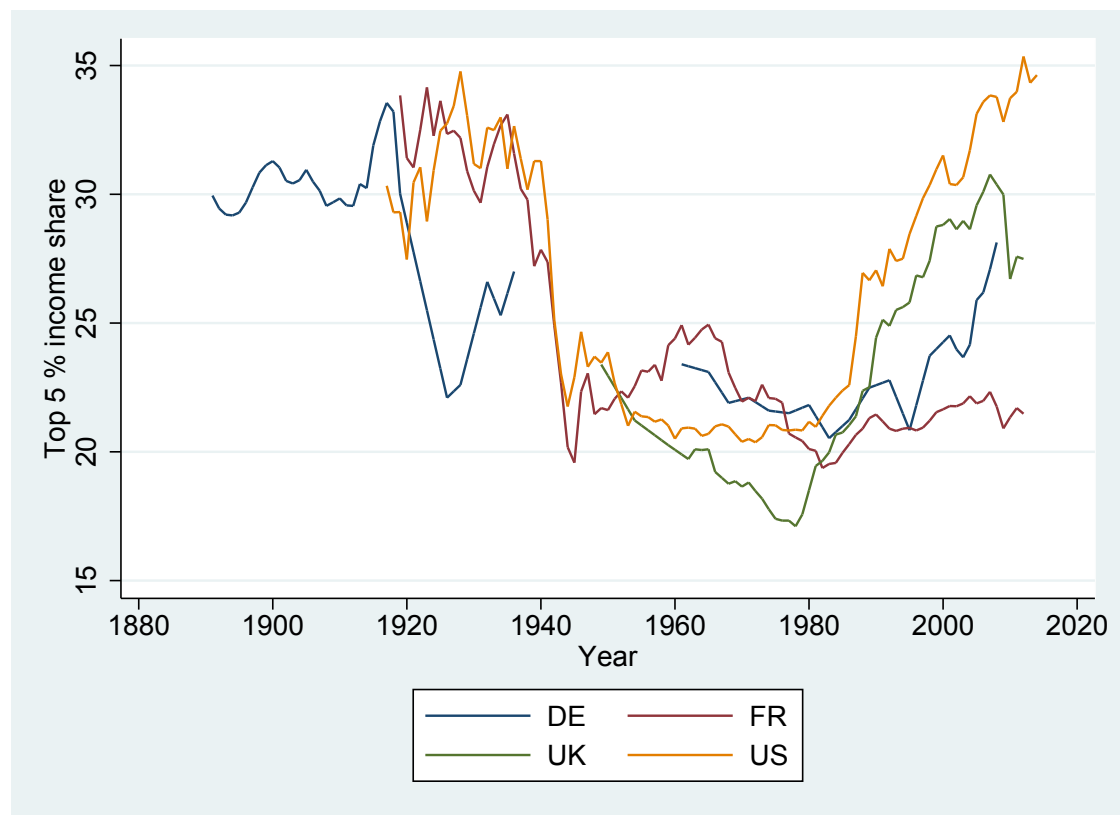


Figure A.1: Top 5 percent share in total income over time and countries. Source: World Wealth and Income Database (Alvaredo et al., 2011).

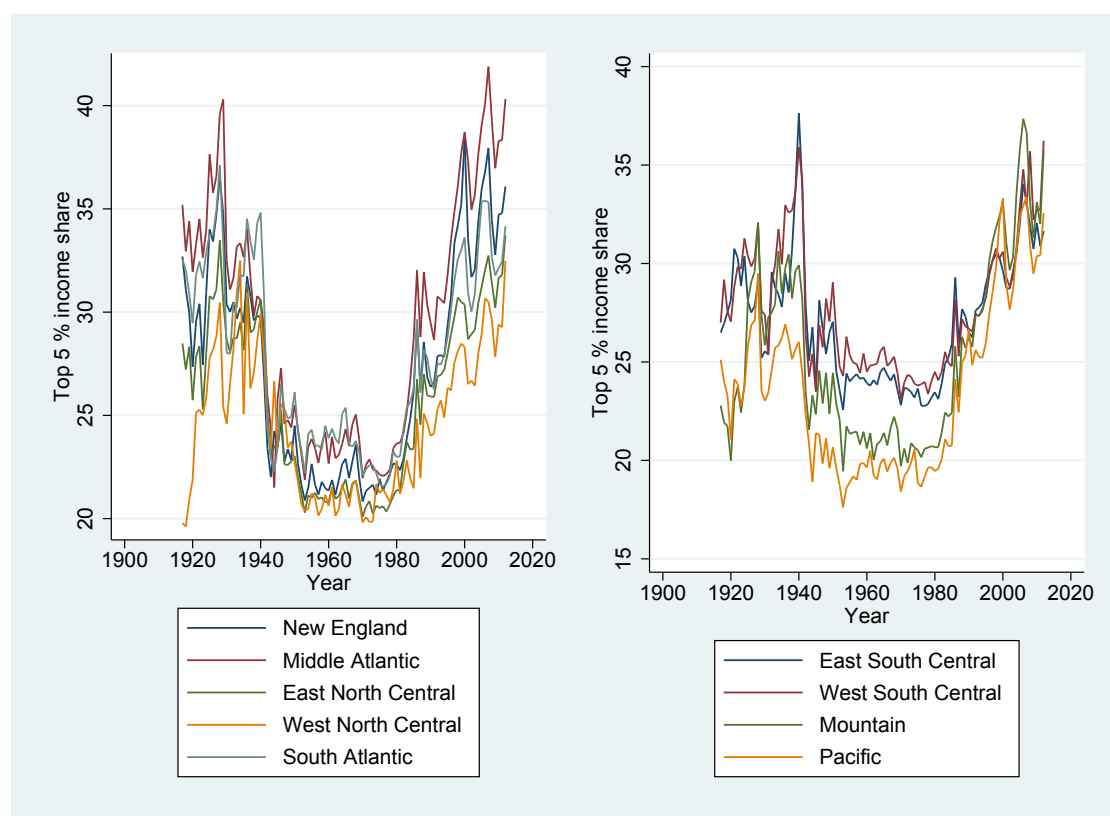


Figure A.2: Top 5 percent share in total income over time and US census divisions. Source: World Wealth and Income Database (Alvaredo et al., 2011).



## C Additional Results from the ISSP

### C.1 Description of the ISSP

We also make use of a unique dataset containing rich data on perceptions about inequality, the International Social Survey Program (ISSP) module on Social Inequality. The ISSP has been widely used to study perceptions of social inequality, see for example Kiatpongsan and Norton (2014) or Norton and Ariely (2011). There are in total four waves of the social inequality module: one in 1987, one in 1992, one in 1999 and the last available one in 2009. On the one hand, the ISSP allows us to examine whether perceived and actual income inequality co-move. On the other hand, we provide an additional robustness check by replicating our main results on the ISSP.

In Table A.20 we report summary statistics for the sample from the ISSP that we use to replicate our main findings.<sup>1</sup> Most of our sample from the ISSP comes from six countries: Australia, France, Germany<sup>2</sup>, Norway, the United Kingdom and the US, each of which makes up for around ten percent of the sample. Canada, Denmark, Finland, Italy, Japan, the Netherlands, New Zealand, Portugal, Spain, Sweden and Switzerland together constitute about 40 percent of the overall sample.

### C.2 Co-movement between Actual and Perceived Inequality

#### C.2.1 Outcome Variables: Perceptions of Inequality

First, we create a variable capturing people's beliefs about how much inequality there is in their countries based on their response to the following question: "These five diagrams show different types of society. Please read the descriptions and look at the diagrams and decide which you think best describes [ COUNTRY ]:

- Type A: A small elite at the top, very few people in the middle and the great mass of people at the bottom.
- Type B: A society like a pyramid with a small elite at the top, more people in the middle, and most at the bottom.

---

<sup>1</sup>We can use a slightly larger sample to examine the correlation between actual inequality and perceived inequality because we can also use respondents who are younger than 26.

<sup>2</sup>Due to lacking inequality data we drop all respondents currently living in Eastern Germany and focus only on Western German Respondents.

Table A.20: Summary Stats: ISSP

| Variable                       | Mean   | Std. Dev. | Min.   | Max.   | N     |
|--------------------------------|--------|-----------|--------|--------|-------|
| Share top 10 during impr years | 30.994 | 3.936     | 21.839 | 44.81  | 38239 |
| Share top 5 during impr years  | 20.36  | 3.329     | 13.343 | 38.555 | 38974 |
| Share top 1 during impr years  | 8.147  | 2.346     | 4.024  | 18.709 | 40508 |
| Gini during impr years         | 31.137 | 5.857     | 20.569 | 44.712 | 18246 |
| Unemployment during impr years | 5.293  | 3.962     | 0.01   | 35.287 | 40663 |
| Age                            | 49.962 | 15.334    | 26     | 98     | 44918 |
| Female                         | 0.524  | 0.499     | 0      | 1      | 44918 |
| Below secondary                | 0.45   | 0.498     | 0      | 1      | 44918 |
| Secondary                      | 0.227  | 0.419     | 0      | 1      | 44918 |
| Above secondary                | 0.309  | 0.462     | 0      | 1      | 44918 |
| Married                        | 0.667  | 0.471     | 0      | 1      | 44918 |
| Widowed                        | 0.076  | 0.265     | 0      | 1      | 44918 |
| Divorced                       | 0.076  | 0.265     | 0      | 1      | 44918 |
| Separated                      | 0.02   | 0.139     | 0      | 1      | 44918 |
| Single                         | 0.154  | 0.361     | 0      | 1      | 44918 |
| Full-time employed             | 0.402  | 0.49      | 0      | 1      | 44918 |
| Part-time employed             | 0.082  | 0.275     | 0      | 1      | 44918 |
| Unemployed                     | 0.031  | 0.174     | 0      | 1      | 44918 |
| Student                        | 0.012  | 0.109     | 0      | 1      | 44918 |
| Retired                        | 0.18   | 0.384     | 0      | 1      | 44918 |
| Other employment               | 0.118  | 0.323     | 0      | 1      | 44918 |
| Catholic                       | 0.273  | 0.445     | 0      | 1      | 44918 |
| Church of England              | 0.086  | 0.28      | 0      | 1      | 44918 |
| Protestant                     | 0.104  | 0.306     | 0      | 1      | 44918 |
| No religion                    | 0.21   | 0.407     | 0      | 1      | 44918 |
| Other religion                 | 0.261  | 0.439     | 0      | 1      | 44918 |
| Household Size                 | 2.774  | 1.294     | 1      | 5      | 43151 |
| Australia                      | 0.138  | 0.345     | 0      | 1      | 44918 |
| Canada                         | 0.035  | 0.183     | 0      | 1      | 44918 |
| Denmark                        | 0.025  | 0.157     | 0      | 1      | 44918 |
| Finland                        | 0.015  | 0.122     | 0      | 1      | 44918 |
| France                         | 0.094  | 0.292     | 0      | 1      | 44918 |
| Germany                        | 0.111  | 0.314     | 0      | 1      | 44918 |
| Great Britain                  | 0.072  | 0.259     | 0      | 1      | 44918 |
| Italy                          | 0.021  | 0.143     | 0      | 1      | 44918 |
| Japan                          | 0.051  | 0.22      | 0      | 1      | 44918 |
| Netherlands                    | 0.03   | 0.171     | 0      | 1      | 44918 |
| Norway                         | 0.082  | 0.274     | 0      | 1      | 44918 |
| NZL                            | 0.059  | 0.235     | 0      | 1      | 44918 |
| Portugal                       | 0.051  | 0.22      | 0      | 1      | 17269 |
| Spain                          | 0.046  | 0.209     | 0      | 1      | 44918 |
| Sweden                         | 0.063  | 0.242     | 0      | 1      | 44918 |
| Switzerland                    | 0.025  | 0.157     | 0      | 1      | 44918 |
| US                             | 0.114  | 0.318     | 0      | 1      | 44918 |

- Type C: A pyramid except that just a few people are at the bottom.
- Type D: A society with most people in the middle.
- Type E: Many people near the top, and only a few near the bottom.

What type of society is [ COUNTRY ] today – which diagram comes closest?” We code this variable such that high values mean that people think that the country they live in today is more unequal, ranking perceived society progressively as more equal moving from type A to type E.

Second, we use unique data on people’s beliefs about earnings in different occupations to construct measures of beliefs about the pay gaps between CEOs and unskilled workers; Cabinet ministers and unskilled workers; and doctors and unskilled workers. For example, the respondents are asked: “How much do you think an unskilled worker in a factory earns before taxes?”; or they are asked: “How much do you think a chairman of a large national company earns before taxes?” We calculate pay gaps as the ratios between the estimates for the higher-earning professions and the estimate for unskilled workers. To account for outliers we winsorize the estimated pay gaps at the 99th percentile.

### C.2.2 Results: Perceptions of Inequality

In Tables A.21 and A.22 we show the results from regressing beliefs about inequality on actual top income shares. In some specifications we add country and year fixed effects and a set of demographic controls. Across specifications, we find that actual inequality strongly predicts people’s perceived level of inequality. These findings suggest that the actual level of inequality that prevailed during our respondents’ formative years is a good proxy for the level of inequality our respondents experienced.

Table A.21: ISSP: Perceptions of Inequality

|                                 | (1)                                | (2)                                | (3)                                |
|---------------------------------|------------------------------------|------------------------------------|------------------------------------|
|                                 | <b>Belief:<br/>High inequality</b> | <b>Belief:<br/>High inequality</b> | <b>Belief:<br/>High inequality</b> |
| Current Income Share of Top 5 % | 0.0371***<br>(0.00142)             | 0.0490***<br>(0.00520)             | 0.0488***<br>(0.00524)             |
| Observations                    | 33,052                             | 33,052                             | 33,052                             |
| R-squared                       | 0.025                              | 0.126                              | 0.157                              |
| Year FE                         | No                                 | Yes                                | Yes                                |
| Country FE                      | No                                 | Yes                                | Yes                                |
| Demographic controls            | No                                 | No                                 | Yes                                |

Robust standard errors are displayed in parentheses. Specification (3) includes a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A.22: ISSP: Estimated Pay Gaps

|                                 | (1)                                | (2)   | (3)                                   |
|---------------------------------|------------------------------------|---|---------------------------------------|
|                                 | Estimated<br>CEO worker<br>pay gap | Estimated<br>cabinet minister worker<br>pay gap | Estimated<br>doctor worker<br>pay gap |
| Current Income Share of Top 5 % | 1.786***<br>(0.200)                | 0.227***<br>(0.0368)                            | 0.153***<br>(0.0198)                  |
| Observations                    | 43,841                             | 43,809  | 44,191                                |
| R-squared                       | 0.182                              | 0.129   | 0.128                                 |
| Year FE                         | Yes                                | Yes   | Yes                                   |
| Country FE                      | Yes                                | Yes   | Yes                                   |
| Demographic controls            | Yes                                | Yes   | Yes                                   |

Robust standard errors are displayed in parentheses. All specifications include a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

### C.3 Replication of Main Results on the ISSP

#### C.3.1 Outcomes Variables: Experienced Inequality

Our main outcome variables of interest on preferences for redistribution focus on the role the government should play and are given as follows:<sup>3</sup>

- **Too much inequality:** “Differences in income in [ COUNTRY ] are too large.” We code this variable such that high values in this question correspond to more agreement to this statement.
- **Tax the rich more:** Moreover, we use a question on people’s desired tax levels for people with different income levels: “Do you think people with high incomes should pay a larger share of their income in taxes than those with low incomes, the same share, or a smaller share?” High values mean that individuals want higher shares of taxes for richer people.
- **Do not reduce benefits to the poor:** “The government should spend less on benefits for the poor”. We code this variable such that high values indicate disagreement with this statement.
- **Party affiliation: Left:** We also use data on people’s party affiliation and their voting intention. In particular, individuals are asked for which party they intend to vote in the

<sup>3</sup>These questions are answered on a 5-point scale where 1 means “strongly agree” and 5 means “strongly disagree”.

next election. The data provided by the ISSP then classifies people’s voting behavior on a scale from (1) far right to (5) far left.<sup>4</sup>

- **Voted: Left:** Moreover, individuals are asked about their voting behavior in the last election. As before we use the derived data from the ISSP that classifies the voting intention on a scale ranging from (1) far right to (5) far left.

### C.3.2 Results: Experienced Inequality

We show the results from the replication of our main findings on the ISSP sample in A.23. We find that high inequality experiences are associated with less agreement that there is too much inequality in the respondent’s country (Column 1). We find no significant effect on agreement to the statement that the rich should be taxed more than the poor, even though the sign of the coefficient goes into the expected direction (Column 2). However, people who have experienced high inequality are significantly more likely to be in favor of reducing the benefits to the poor (Column 3) and are significantly less likely to be affiliated to a left-wing party or to vote for a left-wing party (Columns 4 and 5).

Taken together, the results from the ISSP strongly replicate our earlier findings on the samples from the GSS, Allbus and ESS. This provides us with additional confidence in the robustness of our results.

---

<sup>4</sup>We set this variable to missing for all individuals who either do not intend to vote, or intend to vote for another party not part of this left-right spectrum.

Table A.23: ISSP: Replication of main findings

|                              | (1)                            | (2)                          | (3)   | (4)                               | (5)                    |
|------------------------------|--------------------------------|------------------------------|---|-----------------------------------|------------------------|
|                              | <b>Too much<br/>inequality</b> | <b>Tax the<br/>rich more</b> | <b>Do not reduce<br/>benefits to the poor</b> | <b>Party affiliation<br/>Left</b> | <b>Voted:<br/>Left</b> |
| Inequality Experiences       | -0.0535**<br>(0.0242)          | -0.0101<br>(0.0215)          | -0.0612**<br>(0.0280)                         | -0.121**<br>(0.0560)              | -0.0529**<br>(0.0218)  |
| Observations                 | 34,439                         | 33,445                       | 19,100  | 7,761                             | 26,048                 |
| R-squared                    | 0.142                          | 0.075                        | 0.103   | 0.058                             | 0.075                  |
| Country FE x Age trends      | Yes                            | Yes                          | Yes   | Yes                               | Yes                    |
| Country FE x Year FE         | Yes                            | Yes                          | Yes   | Yes                               | Yes                    |
| Country FE x Cohort group FE | Yes                            | Yes                          | Yes   | Yes                               | Yes                    |
| Unemployment Experiences     | Yes                            | Yes                          | Yes   | Yes                               | Yes                    |
| Demographic controls         | Yes                            | Yes                          | Yes   | Yes                               | Yes                    |

Standard errors are two-way clustered by age and cohort. Inequality experiences are based on the experienced share of total income earned by the top 5 percent during impressionable years. Unemployment experiences are based on the experienced national unemployment during impressionable years. All specification control for age trends, year fixed effects and cohort group fixed effects, each interacted with country fixed effects. All specifications control for a large set of controls: household income, marital status, education, employment status, household size, religion, and gender. All outcome measures are z-scored.\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

## D Description of Outcomes

### D.1 General Social Survey

#### D.1.1 Main Outcomes

- **Help Poor:** “Some people think that the government in Washington should do everything to improve the standard of living of all poor Americans (they are at point 5 on this card). Other people think it is not the government’s responsibility, and that each person should take care of himself (they are at point 1). Where are you placing yourself in this scale?”
- **Pro-welfare:** “We are faced with many problems in this country, none of which can be solved easily or inexpensively. I am going to name some of these problems, and for each one I would like you to tell me whether you think we are spending too much money on it, too little money or about the right amount.” We focus on people’s answer to that question on the issue of “assistance to the poor.” We code this variable such that higher values indicate too little assistance to the poor.
- **Success due to luck:** “Some people say that people get ahead by their own hard work; others say that lucky breaks or help from other people are more important. Which do you think is most important?” The answer can take a value from 1 to 3: hard work is most important (1), hard work and luck are equally important (2), luck is most important (3).
- **Liberal:** “We hear a lot of talk these days about liberals and conservatives. I am going to show you a seven-point scale on which the political views that people might hold are arranged from extremely liberal to extremely conservative. Where would you place yourself in this scale?” We coded the question such that high values mean that the respondent is liberal.
- **Party: Democrat:** “Generally speaking, do you usually think of yourself as a Republican, Democrat, Independent, or what?” We coded this variable such that higher values correspond to support of the Democratic party and lower values to the support of Republicans. We set observations to missing if respondents identify with another party.
- **Voted: Democrat:** We also look at people’s past voting behavior. Specifically, this variable takes value one if the respondent voted for the Democratic candidate in the last presidential election and takes value zero if the respondent voted for the Republican can-

didate. We set this measure to missing if the respondent did not vote in the presidential election or if the respondent voted for an independent candidate.

### D.1.2 Alternative Mechanisms

- **Low relative income:** People’s self-assessed position in the income distribution on a five-point scale reaching from “Far below average” to “Far above average”. We code this variable such that high values correspond to perceived low relative income.
- **Low social position:** People’s self-assessed position in society on a four-point scale, reaching from “Lower class” to “Upper class” We code this variable such that high values indicate a perceived low social position.

### D.1.3 Placebo Outcomes

- **Pro-immigration:** People’s view on whether the number of immigrants should be increased or decreased on a five-point scale from (1) decrease a lot to (5) increase a lot.
- **Pro-guns:** This variable takes value one for people opposing a law which would require a person to obtain a police permit before he or she could buy a gun.
- **God exists:** People’s belief in god on a six-point scale from (1) people not believing in God to (6) people stating that they know God really exists and that they have no doubts about it.

## D.2 Allbus

### D.2.1 Main Outcomes

- **Inequality: Unfair:** Disagreement on 4-point scale to the statement: “I think the social inequalities in this country are fair.” We coded this variable such that higher values correspond to more distaste of inequality.
- **Inequality does not increase motivation:** This variable captures people’s beliefs about the effect of inequality on motivation. High values mean that people think that inequality does not increase motivation.



- **Inequality reflects luck:** Disagreement on 4-point scale to the statement: “Differences in rank between people are acceptable as they essentially reflect how people used their opportunities.” High values mean that people disagree with this statement.
- **Left-wing:** People’s self-assessment of their political views on a 10-point scale. We coded this variable such that high values indicate a more left-wing self-assessment.
- **Intention to vote: Left:** We classified each party based on the classification of parties on the left-right spectrum from Huber and Inglehart (1995). Higher values correspond to intentions to vote for more left-wing parties.
- **Voted: Left:** As above we create an index for each party that our respondent voted for using the classification of parties on the left-right spectrum from Huber and Inglehart (1995). Higher values of this variable mean that people voted for more left-wing parties.

#### D.2.2 Alternative Mechanisms

- **Low social position:** “In our society there are people who are at the top and people who are at the bottom. Where would you place yourself on such a scale?” This is coded such that high values mean that people think that they are closer to the bottom of the distribution.

#### D.2.3 Placebo Outcomes

- **Pro-immigration:** We construct an index of attitudes towards immigrants by looking at the following questions on a scale from (1) strongly disagree to (7) strongly agree.
  - Immigrants should adapt to German customs.
  - Immigrants should not have any right to participate politically.
  - Immigrants should not be allowed to marry Germans.

The index is coded such that more disagreement to these statements receives higher values.

- **Nationalism:** People’s nationalism is measured on a four point scale ranging from (1) very proud to be German to (4) not very proud to be German. We code this variable such that high values indicate high nationalism.

- **Nature determines life:** People’s agreement to the statement “in the final analysis, our life is determined by the laws of nature.” on a scale from (1) strongly agree to (5) strongly disagree. We code this variable such that high values indicate agreement to this statement.

## D.3 ESS

### D.3.1 Main Outcomes

- **Pro-redistribution:** “The government should take measures to reduce differences in income levels.” We code this variable such that high values correspond to agreement to this statement.
- **Left-wing:** “In politics people sometimes talk of ‘left’ and ‘right’. Where would you place yourself on this scale, where 0 means the left and 10 means the right?” We recode this variable such that high values refer to people placing themselves on the left.
- **Voted: Left:** People’s voting behavior in the last election. In particular, we coded up this voting behavior on a right-left scale, taking higher values for left-wing parties and lower values for right-wing parties. As in Giuliano and Spilimbergo (2014), we used the classification of parties on the left-right spectrum from Huber and Inglehart (1995). If the party was not part of Huber’s classification or if a person did not vote, we coded the observation as missing.

### D.3.2 Alternative Mechanisms

- **Trust parliament / politicians / political parties:** “Please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust.”
  - ...[COUNTRY]’s parliament?”
  - ...politicians?”
  - ...political parties?”

### D.3.3 Placebo Outcomes

- **Pro-immigration:** We construct an index of attitudes towards immigrants by looking at the following questions with scales from (1) to (4) and (0) to (10).

- “Allow many immigrants of same race/ethnic group” (4) vs. “Allow no immigrants of the same race/ethnic group” (1).
- “Allow many immigrants of different race/ethnic group” (4) vs. “Allow no immigrants of different race/ethnic group” (1).
- “Allow many immigrants from poorer countries to Europe” (4) vs. “Allow no immigrants from poorer countries to Europe” (1).
- “Immigration is good for the economy” (10) vs. “Immigration is bad for the economy” (0).
- “Immigration is good for cultural life” (10) vs. “Immigration is bad for cultural life” (0).
- “Immigration makes this country a better place to live” (10) vs. “Immigration makes this country a worse place to live” (0).

We code the index such that high values indicate more positive attitudes towards immigrants.

- **Pro-EU unification:** “European unification should go further” (10) or “European unification has gone too far” (0).
- **Pro-democratic:** People’s agreement on a 5-point scale to the statement “Political parties that wish to overthrow democracy should be banned.”

## E Data Description: Control Variables

### E.1 General Social Survey

We control for our respondents' employment status by including dummy variables on whether the respondent is employed part-time, temporarily not working, unemployed, retired, in school, keeping the house or in other employment (the base category is full-time employment). To account for the respondent's marital status, we include the following dummies: whether the respondent is married, widowed, divorced or separated (the omitted category is "never married").

We include the following set of indicator variables to capture our respondent's educational attainment: an indicator for whether our respondent completed at most high school as well as a dummy for whether our respondent completed college ("below high school" is the omitted category). We also include a dummy for whether our respondent is black. Following Giuliano and Spilimbergo (2014) we include dummies for each of the 12 income brackets available in the GSS to control for absolute household income. In addition, we include a set of dummies for our respondents' household size. Finally, we also control for our respondent's religion by including dummies for whether they are Protestant, Catholic, Jewish or whether they have another religion. Finally, we include a dummy indicating the gender of the respondent.

### E.2 German General Social Survey (Allbus)

We control for key demographics, such as income, gender, marital status, education, religious affiliation and employment status. In particular, we control for education by including dummy variables for the type of schooling our respondent completed.<sup>5</sup> We control for marital status by including dummy variables for whether our respondent is married, widowed, divorced or separated (single is the omitted category).

We account for people's employment status by dummies for whether our respondent is part-time employed, unemployed, out of the labor force, student, retired, or in other employment (the omitted category is full-time employment). We also control for people's position in the income distribution in a given year by including dummies for quintiles of self-reported monthly household income.

We also control for our respondent's religion by including dummy variables for whether our

---

<sup>5</sup>In particular, we include dummies for "Hauptschule", "Realschule" and "Abitur/FH". "below Hauptschule" is the omitted category.

respondent is Catholic, Protestant or member of another religion (the omitted category is “no religion”). Finally, we also include a dummy variable indicating the gender of the respondent.

### **E.3 European Social Survey**

We control for education by including dummy variables for whether our respondent completed at most high-school or holds a college degree (no completion of high school is the omitted category). We control for marital status by including dummy variables for whether our respondent is married, widowed, divorced or separated (single is the omitted category). We account for people’s employment status by including dummy variables for whether they are self-employed or not in paid work (the omitted category is that they are employed).

We also control for people’s income level. For waves one to three we make use of the only available income variable which measures absolute household income levels categorized into 12 brackets. For waves four to seven we use a variable on the country-specific income decile that our respondent’s household belongs to. We also control for household size with a set of dummies indicating whether there is one person in the household, two, three, four or more than five.

We also control for our respondent’s religion by including dummies for whether our respondent is Catholic, Protestant, affiliated to another Christian religion, Islamic, Jewish or affiliated to another religion (the omitted category is “no religion”). Finally, we also include a dummy variable indicating the gender of our respondent.

## F Inequality Data

We now provide an overview of the inequality data we use in our analysis. We linearly interpolate missing inequality data up to gaps of six years. In our analysis we make use of those cohorts for which this method gives inequality data for their full “impressionable years” (age 18-25). Table A.24 shows the years for which inequality data are available for the different countries in our sample.

Table A.24: Availability of Inequality Data

| Country                     | Share top 10 percent | Share top 5 percent  | Share top 1 percent  | Gini coefficient |
|-----------------------------|----------------------|----------------------|----------------------|------------------|
| Australia                   | 1941-2010            | 1939-2010            | 1921-2010            | 1981-2010        |
| Canada                      | 1941-2010            | 1920-2010            | 1920-2010            | 1976-2011        |
| Denmark                     | 1903-2010            | 1903-2010            | 1903-2010            | -                |
| Finland                     | 1920-2009            | 1920-2009            | 1920-2009            | 1966-2011        |
| France                      | 1919-2012            | 1915-2012            | 1915-2012            | 1956-2011        |
| Germany                     | 1891-1936; 1961-2008 | 1891-1938; 1961-2008 | 1891-1938; 1957-2008 | 1962-2010        |
| Italy                       | 1974-2009            | 1974-2009            | 1974-2009            | 1967-2010        |
| Ireland                     | 1975-2009            | -                    | 1975-2009            | -                |
| Japan                       | 1947-2010            | 1907-1924; 1947-2010 | 1886-2010            | 1962-2001        |
| Netherlands                 | 1914-2012            | 1914-2012            | 1914-2012            | 1977-2008        |
| New Zealand                 | 1924-2012            | 1921-2012            | 1921-2012            | 1982-2009        |
| Norway                      | 1948-2011            | 1948-2011            | 1948-2011            | 1986-2011        |
| Portugal                    | 1976-2005            | 1976-2005            | 1976-2005            | 1993-2011        |
| Spain                       | 1981-2012            | 1981-2012            | 1981-2012            | 1990-2011        |
| Sweden                      | 1903-1920; 1930-2013 | 1903-1920; 1930-2013 | 1903-1920; 1930-2013 | 1975-2011        |
| Switzerland                 | 1933-2010            | 1933-2010            | 1933-2010            | -                |
| United Kingdom              | 1949-2012            | 1949-2012            | 1949-2012            | 1961-2011        |
| United States (national)    | 1917-2014            | 1917-2014            | 1913-2014            | 1944-2012        |
| United States (state-level) | 1917-2015            | 1917-2015            | 1917-2015            | -                |

In this table we provide an overview of the available inequality data for the countries in our sample. These data are taken from “The World Wealth and Income Database” (Alvaredo et al., 2011) and from the “Chartbook of Economic Inequality” (Atkinson and Morelli, 2014).

## G Construction of Life-time Experiences

As in Malmendier and Nagel (2011) and Malmendier and Nagel (2016), we construct a weighted average of past national-level income shares of the top five percent<sup>6</sup> for each individual  $i$  in country  $c$  and in year  $t$ , using a specification of weights that introduces merely one additional parameter to measure past experiences (Malmendier and Shen, 2016):

$$IE_{ict}(\lambda) = \sum_{k=1}^{age_{it}-1} w_{it}(k, \lambda) I_{c,t-k} \quad (5)$$

where

$$w_{it}(k, \lambda) = \frac{(age_{it} - k)^\lambda}{\sum_{k=1}^{age_{it}-1} (age_{it} - k)^\lambda} \quad (6)$$

where  $I_{c,t-k}$  is the share of total income held by the top five percent of earners in year  $t-k$ . Given that the empirical literature on the role of experiences in the formation of political attitudes posits a big importance of early experiences and in particular experiences during the impressionable years (Giuliano and Spilimbergo, 2014; Krosnick and Alwin, 1989), we assume that experiences before age 18 do not matter. In other words, we construct the experience measures as the weighted average of experiences from age 18 onwards.

The weights  $w_{it}(k, \lambda)$  are a function of  $k$ , i.e. how distant the inequality was experienced relative to the individual's age at time  $t$ , and of the weighting parameter  $\lambda$ . The value of  $\lambda$  determines the relative importance of distant experiences compared to more recent experiences. In our estimations we use a weight of  $\lambda = -1$  which gives rise to a weight that increases linearly when one moves further into the past from the survey year.<sup>7</sup> This weighting scheme gives more importance to people's early experiences, while still allowing for some impact of more recent experiences in life.<sup>8</sup>

---

<sup>6</sup>We used the exact same methodology to look at alternative measures of inequality. The results looked very similar and are omitted for brevity.

<sup>7</sup>We obtain very similar results when we use weights of  $\lambda = -0.5$  or  $\lambda = -2$  instead.

<sup>8</sup>If  $\lambda > 0$ , the weights are decreasing in lag  $k$ , i.e. income inequality experienced closer to current age at time  $t$  receives higher weight.